

CALIFORNIA STATE BOARD OF EDUCATION

PROCEEDINGS

OF THE

State Convention

OF

California High School
Principals

AT

Riverside, California

December 27, 28, 29 and 30, 1916

CALIFORNIA STATE PRINTING OFFICE
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1917

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INTRODUCTION.

This bulletin contains the proceedings of the State Convention of California High School Principals, held at Riverside, California, December 27-30, inclusive, 1916. All of the papers submitted to the secretary have been included in this volume. Certain modifications have been made in order to keep the bulletin within reasonable limits. However, most of the papers have been changed only in minor respects.

It is to be regretted that we have not available the address given by Governor William D. Stephens, the addresses of Professor Thomas H. Briggs, of the Department of Secondary Education, Teachers College, Columbia University; the address of Professor Frank M. Leavitt of the University of Chicago; the address of Hon. E. P. Clarke, president of the State Board of Education; the address of Mrs. O. Shepard Barnum, member of the State Board of Education; the address of Dr. E. R. Snyder, Commissioner of Vocational Education; and the address of Professor W. Scott Thomas, high school visitor for the University of California. The paper by Dr. Alexis F. Lange of the University of California on "The New High School and the New High School Teacher" was published in the Proceedings of the California High School Teachers' Association for 1916. For that reason it has not been included in this bulletin.

This bulletin is printed in order that high school principals may have opportunity to carefully study the suggestions offered at the Riverside convention. It is also to be hoped that much of the material contained in this bulletin will appeal to high school teachers generally and to the members of high school boards.

WILL C. WOOD,
Commissioner of Secondary Schools.

PROGRAM.

Riverside, California, December 27, 28, 29, and 30, 1916.

Wednesday, December 27.

Afternoon Session, 1:30 (General).

MR. WILL C. WOOD, ex officio Chairman, Presiding.

MR. T. L. BRECHEN, Secretary.

Addresses of Welcome:

Hon. Oscar Ford, Mayor of Riverside.

Superintendent A. N. Wheelock, Riverside.

Response:

Dr. George C. Thompson, Alameda.

Commissioner's Address:

Mr. Will C. Wood, Commissioner of Secondary Schools.

Address: "Suggested Modifications of the Requirements for Admission to the State University."

Mr. Harry M. Shafer, Hanford.

General discussion led by Professor W. Scott Thomas, High School Examiner for the University of California, and Mr. E. W. Locher, Maxwell.

Thursday, December 28.

Morning Session, 9:15 (General).

DR. A. W. SCOTT, San Francisco, Vice Chairman, Presiding.

Address: "Suggested Changes in the Retirement Salary Law."

Hon. E. P. Clarke, President State Board of Education.

Address: "The New High School and the New High School Teacher."

Dr. Alexis F. Lange, University of California.

Report of Committee on Minimum Requirements for Graduation.

Mr. J. C. Templeton, Modesto, Chairman.

General discussion led by Dr. A. E. Wilson, Los Angeles, and Mr. Nelson C. Smith, Santa Maria.

Afternoon Session, 1:30 (General).

MR. C. E. KEYES, Oakland, Vice Chairman, Presiding.

Address: "A System of Cost Accounting in the High School."

Mr. Arthur Gould, San Diego.

General discussion led by Mr. C. A. Hollingshead, Santa Barbara, and Mr. Jerome O. Cross, Pasadena.

Report of the California Interscholastic Federation.

Mr. A. M. Simons, Visalia.

General discussion led by Mr. L. L. Beeman, San Bernardino, and Mr. T. S. MacQuiddy, Watsonville.

Thursday, December 28.**Evening Session, 8:00 (General).**

DR. W. H. SNYDER, Los Angeles, Vice Chairman, Presiding.

Music

Debate: "Resolved, that military training be made compulsory for at least one year of the high school course upon all able-bodied boy students enrolled in the public high schools of California."

Affirmative—Dr. J. F. Engle, Auburn; Col. C. H. Murphy, San Francisco.*Negative*—Mr. Irvin Passmore, Chico; Mr. W. A. Doron, Williams.

General discussion.

Friday, December 29.**Morning Session, 9:15 (Section Meetings).***Union and County High School Section.*

MR. W. T. RANDALL, El Centro, Chairman.

MR. R. S. FRENCH, Secretary.

Address: "The Possibilities of the Intermediate School in Union and County High School Districts."

Mr. Merton E. Hill, Ontario.

General discussion led by Mr. Oren B. Waite, Hemet, and Mr. W. E. Hester, Turlock.

Symposium: "High School Extension."

Mr. M. H. Rowell, Sonoma.

Mr. O. H. Close, Fair Oaks.

Mr. C. E. Van Deventer, Sebastopol.

Mr. H. N. Young, King City.

Mr. James Keith, San Andreas.

Symposium: "Co-operation between the County Library and the High School."

Mr. Carl L. Anderson, Corcoran.

Mrs. H. J. Shute, Esparto.

Mr. E. H. Duval, Kingsburg.

City High School Section.

MR. E. M. COX, Oakland, Chairman.

MISS ETHEL ANDRUS, Los Angeles, Secretary.

Address: "The Unification of Secondary Education in the Greater High School."

Mr. F. Liddleke, Fresno.

General discussion led by Mr. W. H. Housh, Los Angeles, and Mr. F. S. Hagden, Azusa.

Address: "The Work of the Junior College Teacher."

Professor B. M. Woods, University Examiner of Junior Colleges.

Address: "Student Body and Class Finances."

Mr. C. L. Boehmrich, Berkeley.

General discussion led by Mr. C. M. Osenbaugh, San Jose, and Mr. F. P. Teller, Riverside.

Friday, December 29.

Afternoon Session, 1:30 (General).

MR. NOEL H. GARRISON, Stockton, Vice Chairman, Presiding.

Address: "The New Requirements Governing Admission to State Normal School."

Mrs. O. Shepard Barnum, Chairman Normal School Committee, State Board of Education.

General discussion led by Mr. DeWitt Montgomery, Santa Rosa, and Mr. E. W. Hauck, Fullerton.

Symposium: "The Organization and Effects of Supervised Study."

Mr. E. E. Wood, Mill Valley.

Mr. Carl H. Nielsen, Vallejo.

Miss Ethel P. Andrus, Los Angeles.

Mr. C. A. Langworthy, Redondo.

Mr. W. A. Ferguson, Porterville.

Saturday, December 30.

Morning Session, 9:15 (General).

MR. WILL C. WOOD, ex officio Chairman, Presiding.

Address: "Co-operation in the Teaching of English."

Mr. F. H. Boren, Lindsay.

Discussion led by Mr. G. A. Bond, Santa Cruz, and Mr. A. J. Cloud, San Francisco.

Address: "Some Needed Legislation Affecting the High School."

Dr. E. R. Snyder, Commissioner of Vocational Education.

General Discussion led by Mr. E. M. Cox, Oakland, and Mr. W. A. Dunn, Los Angeles.

Reports of Committees.

Unfinished Business.

Adjournment.

THE CONVENTION'S WORK IN REORGANIZING SECONDARY EDUCATION.

WILL C. WOOD, Commissioner of Secondary Schools.

In opening this second annual convention of high school principals, I wish to congratulate the high school people of California on the excellent progress of secondary education during the last year. In addressing you at Fresno in December, 1916, I spoke of the remarkable development of the high school in California during the last two decades, and ventured the belief that we stood on the threshold of even greater development. However, none of us realized at that time the strength and sweep of the current that had already set in. In number of pupils enrolled, the high schools of California increased during the last year from 76,000 to 96,000. It is significant that, of the 20,000 additional pupils, 12,000 are in the evening high schools. In fact, the enrollment in these schools has almost doubled. Quite as significant, however, is the growth of 8,000 in the enrollment of the day high schools, which is by far the greatest growth in the history of the state. When we contemplate the fact that the growth in the day high schools exceeds by 1,000 the total growth in the elementary schools during the same period, we realize that the high school is not only attracting more of the graduates of the elementary schools, but also holding them for a longer period. As we study these figures which indicate the development of secondary education in the state, we are justified in the hope that the high school is finding its real place in the scheme of democratic education, and that ere long the institution in which we are working will be recognized generally as an integral and indispensable part of the common school system of the state.

While most of the growth is due undoubtedly to the sound organization of our secondary school system and to recent legislation which has stimulated the reorganization and broadening of courses of study to meet current demands, I am convinced that the high school principals' convention will be the most potent single factor in bringing about the further reorganization that is necessary if we are to realize the ideal of more general and more efficient secondary education. I would not discount the value of official educational leadership in the solution of the great problems with which we are confronted, but I believe very strongly that in solving these problems the secondary schools of California need government by stimulation rather than government by authority. Under present laws, it is possible for the State Board of Education to adopt regulations governing courses of study, the selection of textbooks, and even the internal organization of the high schools, that would result in formal and rigid standardization of high schools throughout the state. That the board has no desire to do so is indicated

its attitude toward legislation having for its purpose the adoption of a series of textbooks for uniform use in the high schools of California. It has stood firmly and steadfastly against the plan of uniformity. We can not escape the fact, however, that there is abroad in the state a feeling that the high school should "find itself," and that if it does not succeed in finding itself, some public agency must assume the function of standardization. In authorizing this convention, the legislature has given the high school people an opportunity to discuss problems of administration and organization to the end that we may have not only greater community of interest but also greater community of action. It is the hope of the state board that this convention will suggest from time to time such regulations as it may deem wise, so that the state board may make the consensus of opinion in the convention the basis of any regulations it may adopt, or any legislation it may recommend. In this way the convention may become that potent factor in the development of secondary education that its creators intended it should be.

The high school principals' convention has already exerted its influence in behalf of better high school organization. I should estimate that as a result of the discussion at Fresno approximately one-fifth of the high schools have reorganized their study plans on a better basis. The exchange of ideas on the keeping of records and reports has resulted in better organization of the principal's office. In many schools there has been more intelligent management of student activities. I can not refrain from recalling the recommendations of the Fresno convention and stating what has been done to make them effective. The recommendation that the State Board of Education maintain the policy of holding one state convention rather than four district conventions, has been adopted. The recommendation that the school laws be codified is in process of fulfillment, but only a partial codification can be attempted at the coming session of the legislature. The State Board of Education has made effective the suggestion that all high school certificates granted to inexperienced candidates be made probationary for the first two years of service. As recommended by the convention, the University of California has established a higher professional degree in education, and a bill will be introduced at this session of the legislature providing adequate funds for a practice school for teachers-in-training at the state university. As a result of the convention's recommendation, a better plan for handling library funds will be presented at this meeting. A bill providing for a plan of visual education for the entire state has been prepared and will be introduced at the coming session of the legislature. The Smith-Hughes bill, providing national aid for vocational education, which the convention endorsed, will probably be a law within thirty days. The plan of

adopting a series of textbooks for uniform use in the high schools of the state, which the convention opposed so vigorously, will not, in my judgment, be recommended by the special committee of the legislature appointed to investigate the plan, and consequently will not be enacted into law. The entire program outlined by the committee on resolutions at Fresno has been adopted or is in process of adoption by those to whom it was recommended. I am sure that no other teachers' convention in California has had its program of constructive work accepted so speedily and so expeditiously.

In making the program of this convention, I have included the topics suggested most frequently in the replies to my questionnaire. While the program of the convention must always include the topics which the principals deem most timely and in need of discussion, I wish to suggest the desirability of undertaking certain work which will continue over a period of years. Any constructive program in secondary education must be based upon careful investigation and discussion; it must not be pedantic, nor narrowly empirical nor impressionistic. It must be a program of co-operative investigation having for its purpose the development of a plan of co-operative achievement. I trust, therefore, that the suggestions I offer, looking toward the development of a constructive program in future conventions will appeal to you as worthy of consideration.

I am sure all of you must be impressed with the increasing need for certain fundamental readjustments within the field of secondary education. Until recently we have regarded secondary education as practically synonymous with high school education. However, we are coming to realize, in the light of modern psychology and present social needs, that the word "secondary" applies, not to a single four-year institution, but to an eight-year field of education whose lower limit is the beginning of the seventh year and whose upper limit is the end of the fourteenth year. The lower limit is the point where the pupil, having possessed himself of the working tools of knowledge, begins prevocational work or certain other courses which have heretofore been regarded as strictly high school work. The upper limit is the point where the student, having completed a reasonable amount of foundational work, begins to specialize in professional or other higher courses. The field between these limits is the field of adolescent or secondary education with which we are especially concerned.

California is responding, more rapidly than some of us realize, to the conception of an eight-year field of secondary education. The law permitting communities to establish junior colleges was enacted in 1907, and the law legalizing the intermediate school and providing a method for extending it to union high school districts was enacted in 1915. At the coming session of the legislature a comprehensive bill, providing

for the organization and maintenance of junior colleges, will probably be enacted. The law relating to the intermediate school probably will be amended so that small high school districts, with the consent of the people, may take over the seventh and eighth grades. Both the intermediate school and junior college movements are gaining momentum rapidly. In such circumstances it is very important that we begin to consider carefully the readjustments made necessary by the adoption of the eight-year plan of secondary education.

It would seem, at first blush, that the reorganization of the system on the eight-year basis is quite as simple as adding a second-story flat to one's dwelling, or raising the dwelling and constructing a flat in the basement. Those who have had experience with intermediate schools and junior colleges will challenge any assurance regarding the simplicity of reconstruction. They will tell you that the stairway from the intermediate school on the basement floor, instead of coming up into the hallway, as all good stairways should do, frequently leads right out into the pantry, or even into the well-ordered living room of the high school. The people in the intermediate school will tell you that the high school people on the second floor will not allow their chimney to be connected with the flue above, and in consequence, they are sometimes "smoked out," to their discomfiture. Only recently the junior college people awoke to find their apartments so full of smoke that they suspected their house was afire. It turned out, however, that someone in the university flat above, with innocent intent, had thrown a handful of powder down their chimney. All this has come about because the dwellers in each flat, though they were ambitious for a more pretentious home, are averse to moving their furniture or changing the arrangement of their homes. It would seem that the time is opportune for getting together and planning the readjustments that are necessary to make the new structure more convenient for all concerned.

This convention, through committees appointed for the purpose, may render the secondary school system a real and lasting service by studying and discussing, not academically, but in the light of experience, the fundamental problems of reorganization. Shall we have, in California, a three-year intermediate school, followed by a three-year high school and a two-year junior college? Or shall we have a four-year intermediate school embracing years seven to ten, inclusive, followed by a four year high school embracing years eleven to fourteen, inclusive? Or shall we have differentiated courses in the last two grades of the elementary school, followed by a six-year high school? Or shall we have a six year high school, embracing years seven to twelve, inclusive, followed by a two-year junior college? Or does it matter very much how the several institutions occupying the secondary school field are

organized with respect to years of work included? If we agree upon the types of institutions needed, what shall be the aim of each which will differentiate it from the others? What shall be the nature of its organization, and how shall the work of the several institutions be articulated? What shall be the course of study in each institution, and what credit shall be given by the institution above for work done in the institution below? These are only a few of the problems of readjustment in the field of secondary education which we must carefully consider, if the reorganization now in process is to be permanent and progressive.

Another phase of school organization deserving of careful consideration is that of educational measurements. In recent years we have abandoned the examination as a test of the pupil's progress, and have adopted, instead, the rating of the teacher given on the basis of recitations and occasional tests. We are coming to realize, however, that teachers' marks frequently do not mean very much. Recent investigations made by Professor Dearborn of the University of Wisconsin, and Dr. Finkelstein, have revealed how fallible are the marks given by teachers. Dr. Finkelstein reproduced by plates two papers written by two pupils at the end of the first year's work in English. These two papers were marked by 142 teachers of first-year English according to the practices and standards of their respective schools. The range of variation in the marks given was tremendous. For one of the papers, the lowest mark was 64 and the highest 98. Nineteen teachers marked the paper 80 or lower, and fourteen marked it 95 or higher. In mathematics the variation in marks was even greater than in English. The paper was marked by 118 teachers. Of this number 47 gave a passing grade or better, and 71 gave less than a passing grade for the paper submitted. Twenty teachers marked the paper less than 60, and twenty marked the paper above 80. It was also found that when teachers were asked to regrade papers after a sufficiently long interval, the second mark sometimes differed as much as ten or fifteen points from the first mark.

When we consider the fact that pupils are obliged to repeat work on the basis of teachers' marks, we realize the importance of this problem. Pupils are advanced from year to year, are graduated and recommended to the university, on the basis of teachers' marks. And teachers' marks for the same paper vary 35 to 40 points! It would seem that there is need for devising a plan of educational measurements that will evaluate more clearly and justly the work of the pupils. Examinations will not overcome the difficulty, since examination papers will be graded with corresponding variation. Fortunately a beginning has been made in working out standard tests which will overcome this variation. The Hillegas-Thorndike scale and the Harvard-Newton

scale in English composition, the Rugg scale in free-hand lettering, and the Storch scales in Latin, German, French and physics, offer suggestions in working toward a solution of the problem. The principals of California high schools could not undertake a work more fruitful and beneficial than an investigation of the reliability of teachers' marks and of standard scales for evaluating the work of pupils and classes.

The third and last group of problems to which I would call attention is that concerning courses of study. During the last year I have made an analysis of California courses of study, and I realize, far better than before the analysis was made, the need for careful consideration of this problem. We have no established and generally accepted constants or minimums in our courses of study. Each school prescribes its own minimums and fixes its own requirements for graduation, consequently diplomas of graduation vary greatly in their meaning. I believe that the time has come for discussing the prescription of certain constants or minimums in our courses of study.

In considering this problem it is well to keep in mind our experience in organizing courses of study. Shortly before 1890 we gave up the single-track curriculum and adopted a three-track curriculum, including the classical, scientific and commercial courses. In 1893 there appeared the report of the famous Committee of Ten, of which President Eliot was chairman. This report contained the recommendation that courses of study be organized about nine prescribed "constants"—three of English, two of mathematics, two of foreign language, one of history and one of science. This plan offered considerable opportunity for election. Within a short time, however, a considerable number of high schools abandoned the plan of "constants," except the requirement in English, and organized their courses on a purely elective basis. It was urged that the high school is an institution in which the pupil should be given the fullest opportunity to "find himself," and that the best and most direct way for the pupil to "find himself" is to follow the line of his interests. We have worked under this plan long enough to find its limitations. We have found that for a considerable number of pupils the line of their interests is the line of least resistance. The plan has failed to secure a proper balance between interest and effort. It has also failed to assist many worthy students to find themselves soon enough. A short time ago I visited a school in which the elective plan was still in vogue. A fine-looking eighteen-year-old boy had called at the office and informed the new principal that he wanted to shape his fourth-year course so that he could enter the university. After three years in the elective system he thought he had "found himself." The principal looked over his card and informed him that he had just five units of work for which he could be recommended to

the university. He had elected too many courses of the "least resistance" kind. When he was informed that he must spend at least two years in high school before he could be recommended, he reversed the decision he had made; he decided he would not go to college, so he took his books and went home. He had "found himself" too late. In such circumstances we may well raise the paradoxical question: "What is the use of a boy's 'finding himself,' if in doing so he 'loses himself'?" This is only one of numerous instances. While the school should provide opportunity for the pupil to "find himself" it should, with equal care, provide educational guidance that will keep the pupil from "losing himself." I am of the opinion that the kind of educational guidance that is most available and most easily administered is that embodied in curriculums arranged about a group of foundational subjects or constants.

In my last biennial report which was mailed to each of you a few weeks ago, I have outlined a scheme of organization which includes three chief elements. The first suggestion is that in all high schools 16 units of work shall be required for graduation. The second suggestion is that eight units shall be prescribed in English, foreign languages, mathematics, history and natural science, including a minimum of two units of English, one unit of American history and civics, and one unit of science. This entire group of eight units may be designated the group of foundational subjects; the four prescribed units within the group of foundational subjects may be designated the constants; and the remaining four units in the group of foundational subjects may be designated the variable foundational subjects or variables. The third suggestion is that the remaining eight units be elective, with the sole restriction that the pupil must elect his work so that he will have a three-unit group in each of two subjects, including the foundational subjects, and a two-unit course in at least one other subject. The fourth suggestion is that the pupil be required to take at least two units in the group of foundational subjects during each of the first two years.

Under the plan proposed, a pupil may omit all work in mathematics provided he puts the time thus saved on the other foundational subjects. He may omit all work in foreign languages, but he must elect so much more of English or mathematics or history or science. The acceptability of the plan would seem to depend upon two main questions: First, are we justified in requiring eight units of work in the group of foundational subjects; and second, should the four constants suggested be required of all pupils? I have submitted the plan, without comment, in my report, as a basis for discussion in future conventions. I trust you will feel free to criticize it, or suggest changes in it, or reject it altogether. In case it is rejected, however, I would request

that the convention submit an alternative plan, since the State Board of Education must adopt some standard according to which it will approve or disapprove of courses of study submitted by the various high schools of the state.

Before closing this discussion of the course of study I wish to suggest the desirability of considering plans for reorganizing the content of the courses of study in certain subjects. Heretofore we have been guided very largely in our selection of the content of the various courses by the requirements for admission to the state university. I mean no disparagement of these requirements when I suggest that we need not accept them as on parity with the Ten Commandments. I am of the opinion that the university does not desire that we consider them in the light of the law of Moses and Persians. The university recognizes that it is quite competent to prescribe requirements for admission based upon the needs of that institution. However, the high school people may speak with equal confidence concerning the needs of society generally, and of the community especially. It is suggested, therefore, that the school people of California, in this convention, or through some other organization, shall consider the content of the several courses of study and suggest such modifications as may appear desirable. Two years ago the California Association of Teachers of English worked for some time on the course of study in English, with the result that the course suggested and adopted is far better than the old course. Plans for reorganizing other courses are now being discussed in teachers' organizations. It would seem very desirable that these suggestions be presented and discussed at the principals' convention before they are finally adopted. The matter of reorganizing the content of courses of study must command careful attention during the next two or three years. I understand that the Committee on Reorganization of Secondary Education appointed by the National Educational Association will present its final report at the meeting of the Department of Superintendence in February. This report will undoubtedly influence secondary education throughout the nation in greater degree than any report since the famous Report of the Committee of Ten in 1893. It would, therefore, seem eminently desirable that we give some time to the consideration of problems of the content of the various courses in future conventions. Such problems as these, and the others I have mentioned, may best be studied and presented by committees of the convention appointed for that purpose.

I realize that the program I have outlined is an ambitious one. However, it is proportioned somewhat to our responsibility as administrators of the state's secondary schools. The growth of enrollment in the secondary school, the increasing popularity of evening high schools, the demand for vocational training, the steady pressure of society upon

the secondary school, and the unparalleled willingness of the public to support the high schools of the state, all mean that the people of this most democratic commonwealth in America have faith in the work we are doing and in our ability to reorganize our schools to meet the needs of advancing democracy. They are coming to realize that the common school system of the state must extend beyond the period of graduation from the elementary school. Secondary education is becoming common education because it is necessary to sustain the life of democracy. In no other state is faith in secondary education stronger than it is in California. We are therefore under obligation to arise to the responsibility that this faith imposes upon us.

Just a few words in closing concerning the place of secondary education in an American state. There was a time in the history of our country when a knowledge of the three R's seemed sufficient education for the average citizen. It was in the days when families dwelt far from one another; when each family was an economic unit, raising practically all its food and making all its clothing from the raw materials produced on the farm. Those were the days when the greater part of business was barter and the only important industries were agriculture and home manufacture of articles used by the family. Those were the days when men saw little of one another, when the only world in which the average man was interested was that which lay within a narrow radius. In consequence, our forefathers developed an intense individualism which strongly tinged our early democracy. In matters of government it found its best expression in the words of Thomas Jefferson, who declared that the best form of government is that which governs as little as possible. In economic relations it found expression in the doctrine of *laissez faire*. It was a time when men were free to make themselves, and if they failed in the making it was nobody's business but their own. It was a fine democracy for the time, but it could not outlive the conditions which led to its being.

During the last century our conception of democracy has changed. We are no longer a nation of homestead owners. We are a great industrial and commercial people. More than half of us are living within thirty feet of our neighbor's home, and many of us much closer. The family is no longer economically independent. In a remarkable degree we are dependent upon one another. Our daily tasks bring us in touch with hundreds of people. Recently, when a great strike threatened to rupture the arteries of commerce, we appealed frantically to the government to save us from impending hunger. So closely are our interests associated that a shake in the corn market sends a shiver throughout the body of our nation. In consequence, our individualistic democracy has given way to a great social and industrial democracy. Our motto is no longer "Let me alone so that I may work out my own

salvation." The motto of our twentieth century democracy is "Let us co-operate, that we may attain a common salvation and a common good." Our government is no longer concerned only with problems from which it can not escape; it is engaged in fostering great enterprises, in regulating other enterprises for the common good and in undertaking enterprises such as rural credits and vocational education, because these enterprises are necessary for the development of the nation.

A nation composed of a hundred million individuals closely associated in all the activities of life and dependent upon one another demands a system of education that will prepare men and women to be socially efficient. It demands training for co-operation—training that will prepare the youth of the land to fit into the most complex social and industrial system that the world has known. It demands a system that will guarantee to each youth a fair chance to become the most efficient and happiest worker to which his native abilities and ambition entitle him. It demands a training that will make the individual broad-minded and social-minded. The future American will not think in terms of family or community life, but in terms of national and world life. The three R's are not sufficient to meet this demand; an elementary school training is not sufficient to meet it. The only institution that can meet the demand and meet it adequately for the great majority of future Americans, is the secondary school—a bigger, broader and better institution than the one we know, but one whose foundation has been laid and which is now in process of reconstruction. The question confronting the American people is not "Can we afford a bigger, broader and better secondary school system?" It is "Can we afford to be without such a system?" It is because our work is worthy and our responsibility great, that I have made these suggestions for common service, not in the interest of the present moment, nor in the interest of ourselves, but in the interest of that greater democracy on whose threshold we are privileged to stand.

SUGGESTED MODIFICATIONS OF THE REQUIREMENTS FOR ADMISSION TO THE STATE UNIVERSITY.

HARRY M. SHAFER, Principal Hanford High School.

I. Introductory.

In 1899 Colonel Francis W. Parker of Chicago delivered a series of addresses before teachers' associations in eastern Massachusetts. With the keenest of satire he ridiculed the admission plan of colleges and universities, that only he who could sit at a desk a series of hours and correctly answer sets of questions placed before him, was prepared to enter college. He pictured the president of Harvard University standing with his eye to the crack of the slightly opened door and receiving most cautiously each grade and manuscript of each candidate. Only he who possessed the necessary per cents in each subject was worthy of any consideration whatever.

A year or two prior to the same date the first conference between high school principals and the state university was held at the University of Illinois. Some of the principals asked for admission of high school graduates to the university upon their records made in high school, and they also requested that in case a high school could not do all of the required work, the university should recognize the work that was completed according to requirements.

President Andrew Sloan Draper opposed such action, while Doctor Arnold Tompkins heartily favored it.

At the present time the institutions that do not employ such a plan, or one even more liberal, are not numerous. Today the written examination is used as a test for promotion only in those communities whose educational advancement has been retarded for one reason or another.

II. The liberal policy of the University of California.

Many years the University of California has been much more liberal than most other institutions of higher learning. In some respects it has been in the lead.

Eight years ago President Benjamin Ide Wheeler, while on an Eastern trip, found the high schools and colleges of that region involved in a serious controversy concerning admission requirements. On the way home on a Union Pacific train he remarked to a group of people, of whom the speaker was one, that the University of California would do all in its power to prevent such a situation arising in this state.

The result was that the university anticipated the problem, met the conditions before they developed, and gave a great impulse to popular higher education. Good feeling has existed between the high schools and the university.

Correlative: The most conservative part of the school system of a state is its institutions of higher learning. Hence, there are certain

problems for discussion and solution, among them, the question of needed changes in admission requirements.

III. A few fundamental considerations, stated in the form of theses.

1. Before the evolution of admission requirements can proceed much further it will be necessary for the university to state as clearly and as concisely as possible its attitude toward the junior college. The two questions are closely connected.

2. The high school period is a testing time as well as a training time. We can not be sure what is best for each pupil to study.

One of the leaders in the field of educational psychology in the United States did not hear of psychology until his sophomore year in college. After studying it a few months, he said: "I have found my life work." Many students, after reaching college, find that they have studied too narrowly. They lose much time in attempting to make a transfer of courses of preparation and are often prevented from doing the thing that they finally have found themselves adapted to do.

Most estimates of the worth of subjects are obtained by comparison and evaluation of the subjects. Is it not better to make the individual the center of interest?

3. Boys and girls differ so materially, both as sexes and as individuals, that no one subject, with the possible exception of the mother tongue, is essential to each person.

4. During the adolescent period the process counts for more than the product. The pupil who turns out a crude product sometimes should be ranked higher than the one who gets a more finished result; his progress and effort may have been greater.

While tutoring at Harvard University the speaker often coached students who passed the examinations with A or B, honor grades, and who declared they knew nothing about the subject. Anyone familiar with their state of mind could readily concur in their opinion.

5. "Accept anything which the schools do well. We gain more in interest in life problems than we lose in academic finish." The words of the dean of one of the half dozen largest universities, one that receives generous support from its state, as well as large appropriations.

Note. A school should not insist on consideration unless it does its work well. The State Board of Education, the Commissioner of Secondary Education, and the university can join efforts in improving situations.

6. In a democracy, and especially in a democracy with a large immigrant population, opportunities for education should be as free as possible. Too long and too much emphasis has been placed upon admission requirements. Every institution should be far more particular as to who graduates than as to who enters.

7. It is as much a question of influence coming to a school and to students through knowing they *can* go to college as of those who actually go. The student who knows his work will admit him to college has dignity added to that work.

8. There must be mutual study of both sides of the problem. Secondary school instructors study college requirements, courses and plans. It is hoped that college instructors study such questions as these:

(a) Are the students prepared for us, *and* are we prepared for them, that is, do we and our work meet their need?

In some departments of the University of Washington the high school graduates with preliminary training in the high schools did no better work than did those without such training. (See School Review, October, 1916.) In other words, "what becomes of the university's required or recommended preparatory subjects?"

(b) Why does the work of some students slump after a few weeks college residence?

(c) Has the student any right to know from the beginning the instructor's system of judging him?

(d) Does my instruction stimulate the student's enthusiasm and action on his present level of thought as he comes to me from the high school?

(e) Why are certain freshman courses prescribed?

(f) How is a freshman's course in one department related to his courses in other departments?

9. Personality, attitude of mind, and character should be given more prominence.

IV. A questionnaire was sent to one hundred principals who, in various ways, had indicated an interest in the question of admission requirements. Suggestions were sought. The ones most commonly mentioned were as follows:

1. There should be no question whatever as to credit for economics. It deals with current, live problems, with real situations that confront every citizen. Questions of conservation, production, distribution, consumption, land, labor and capital are vital to the life of the individual and of the nation.

The pupil who can distinguish between the demagogue and the economist, between harangue and economic thought, is on the way to high class citizenship.

2. (a) Increase English requirement to three years.

(b) Give regular allowance for debating, journalism, oral expression, etc.

(c) Change the contents of English 1 and English 14 along the line of the recommendations made by the English Teachers' Association.

d A person may submit two years of English, one year of Latin, and one year of German, and, other things being equal, receive full matriculation; whereas, if he submit four years of English and no foreign language, he will be deficient.

3. Make foreign language elective.

a An engineering student may present two years of French, but not machine shop, forge, foundry, etc.

b Which is better preparation for treating a wound or setting a fractured bone, manual training or foreign language. Often the latter excludes the former.

c The requirement for junior certificate forces the pupil to take another four years of Latin or an unnecessarily large amount of mathematics.

4. In order to meet requirements, a possible engineer, on entering high school, must decide his future vocation; otherwise he will be likely to fall short of credits. Is this not asking too much of the immature pupil?

A certain young man had completed three years of work in his home high school. During the past summer the militia company to which he belonged was ordered to the Mexican border. While in the service he became tremendously interested in engineering. In the autumn he returned to his high school and, in his senior year, is confronted with the impossibility of preparing for admission to the college of engineering without prolonging his secondary education. His three former years in high school included a broad range of subjects, and were too broad for engineering.

"Suppose a high school boy is a mechanical genius, and elects a number of courses which carry him on in the line of his interests as far as possible in the high school. He then desires to go on with engineering work in the university. Under present admission requirements it is impossible for him to do so."

The same thing is true in a variety of other ways. A boy or a girl whose interests are strong in some one line may be kept in high school by being allowed to develop one-sidedly, and just at the time when he or she needs the broadening influence of the university, the university, under present conditions, closes its doors.

5. Give industrial training greater consideration.

6. Link up high school commercial departments and the College of Commerce.

Present requirements for admission to the College of Commerce are the same as those for admission to the College of Letters and Science. This is not suited to meet current educational needs.

7. Accept, as on the same plane as chemistry or physics, biology and botany given in second year laboratory science.

8. Eliminate mathematics requirement for girls.

9. Those who are to pursue agriculture in the university find it to their disadvantage, so far as credits are concerned, to take agriculture in high school. Readjustment is needed here.

10. Give no credit or all credit on general fitness for college work. This would place the burden of responsibility upon those who know the ability of the student.

11. The "List of Preparatory Subjects," as given in the literature of the university, should be simplified and freed from technicalities, so that a layman can readily understand it. Parents and high school students should have direct access to the information sent out from the university; but the "List," which too much resembles a series of examples in algebraic factoring, is Greek to them. A large per cent of high school teachers, and some principals, do not fully understand it. Would it not be better expressed in current English?

Since high school work is measured by years or semesters in the California high schools, why should it not be so measured for entrance-requirement in passing from high school to the university?

The Carnegie unit is employed the country over and is based on the same plan. Its use would make our university admission unit intelligible to all interested persons throughout the nation.

12. In order that there may be as rapid progress and as complete cooperation as possible of all educational interests involved, it is recommended that a joint committee of six or more members, three or more university professors and three or more high school principals, be constituted to recommend a plan or system of college entrance requirements.

The School Review for December, 1916, contains a timely article entitled "A Study of the Credit Granted to High School Graduates." It is a study of the credits actually granted for college entrance to 32 graduates from each of 11 schools located in or near Chicago. The facts finally included deal with 312 graduates from representative schools, and reveal a situation which is probably typical of most sections of the country.

"None of the schools graduates a student with less than 2.1 to 3—almost without exception 3—units of English, a somewhat larger proportion of the students are graduated with 4 than with 3 units, and a small percentage are graduated with even more.

That schools are breaking with tradition in the requirement of foreign language is to be seen in the fact that practically 10 per cent of the students are graduated without any credit in this field. The small percentage being graduated with 1 unit may reflect a practice in some of these schools of denying credit for a single year of foreign

language. There is no marked modal amount of foreign language with which these students are graduated.

No student of the 312 has been graduated without some traditional mathematics, although about 10 per cent have had but a single year. The modal offering is 2 to 3 years, probably, in part at least, out of deference to current college entrance requirements.

Only 2.2 per cent have completed their work without science, although rather large proportions are graduated with small quantities of this work. Only about one-ninth of the students are credited with as much as 3.1 to 4 units of science.

History and allied subjects do not find a place in the curricula of 4.5 per cent of the graduates, an approximate fourth complete the high school with a single year, one-third with two years, one-fourth with 3 years, while but an approximate tenth have 3.1 to 4 years.

It is a fact of significance that a considerable proportion of the students are permitted to regard their high school curricula as completed when they have had little or no foreign language or practically none of the traditional mathematics. It suggests an open disregard of the older requirements for college entrance, as well as—which is a matter of greater import—a belief that a high school curriculum with little or none of these subjects may be worth while.

The fact that large proportions of students are graduated with as little as one or two years of work in each of the subjects except English should point a moral to the specialist in each of these fields. It should teach the specialist to cease to cozen himself with the delusion that all high school students will have a full sequence of three or four years in his field and that he can plan his work on the basis of this delusion. Even though we may be convinced of the value of consecutive work through several years in two or more subjects, we should not be oblivious to the fact that many high school students do not have sequences—may have but a single year—in our particular field, finding it more advisable to do more extended work in other fields. For example, teachers of foreign language may need to open their eyes to the need of organizing and presenting single-year courses that are worth while in themselves without regard to any work that may follow. Similarly, teachers of science who are giving thought to their perplexing and important problem of how to develop a coherent sequence in their particular province of learning must not forget that they must continue to offer year courses that often will not be followed nor always be preceded by other year courses in science.”

SUGGESTED MODIFICATIONS OF THE REQUIREMENTS FOR ADMISSION TO THE STATE UNIVERSITY.

By EDWARD W. LOCHER, Principal Maxwell Union High School.

I shall not attempt more than an outline of the treatment I should like to give; touching on the divisions into which the subject may properly fall, the recent opinions of well-known educators upon certain general phases of the question, the more striking suggestions made by some of our California principals and teachers with reference to our own chief problems, and finally, a few conclusions and suggestions which I have deduced therefrom, plus my own opinions.

The requirements for admission may be grouped into three divisions, namely: First, the completion of a certain quantitative and qualitative assignment of subject matter in a satisfactory manner; second, the certification of the principal of an accredited school; and third, as an alternative for the second, the passing of a varying number of examinations in the matriculation subjects by the applicant not so fortunate as to enjoy admission upon certification.

With regard to the first of these—the question of required subjects—I shall have nothing to say, as I feel that the much-discussed hereditary conservatism of the university with reference to the admission of new subjects is, in the West, at least, a well-nigh groundless bugaboo. At least, if we are to concede at all the right of the university to set up any arbitrary group of preparatory subjects which it will recognize for matriculation purposes, we can have no quarrel with the liberal attitude taken by the Western universities in this direction in recent years. Probably many of us believe that some restriction upon the arbitrary power of the university in the matter of this quasi-domination of the high school curricula might be salutary, but that question may well be regarded as a moot subject for another discussion.

With regard to the second question, that of accrediting and admission from accredited schools upon examination, much could be said, for and against. With regard to accrediting, in general, I have found very few among recent writers, or among my correspondents of the California high schools, who would go to the extreme of utterly condemning it, even when conducted solely by the university.

That the system can be greatly improved, and in ways that I shall hereafter suggest, is quite generally conceded.

Among the chief objections advanced are the following, which my time limits permit me to mention, but not to discuss:

(a) As the average high school principal whose school is on the accredited list, will only risk the certification of the above-average student, the tendency will be to preclude the enjoyment of college privileges to the average student, who oftentimes becomes the best college student when fortune permits him to enter on some other basis.

b Accreditation, since it is concerned only, or primarily, with the recognized subjects, does not give a complete and therefore just basis of judging the potentialities or accomplishments of the schools concerned.

c Accreditation, as now practiced, is concerned only with the work of the students in the school or in the university. It fails to consider the success of the graduate in other fields—the normal school, the business college, other institutions of learning, or in the multifarious walks of business or daily life.

d The system tends to focus the attention of the school upon the single ideal of being accredited, to the detriment, often, of certain more vital interests of the school community.

e The accrediting representatives of the university are oftentimes unfamiliar with the nature of the high school problems. They may be acquainted with very little of the subject matter taught in the schools, and may themselves lack in power of teaching or of judging teaching.

f The examination of the school is too brief, and too infrequent, to prove a sure index of the merits of the school or its work.

g The point of view is too narrow—that of the university only, in most cases.

h It places the control of many of the functions and plans of the high school in the hands of another authority.

i Principals, particularly of schools long on the accredited list, become so accustomed to this quasi-domination of the university as to no longer seem aware of it, and by their own indifference open the way for its extension.

j Teachers and pupils, particularly in schools where visitors are infrequent, tend to become embarrassed and disturbed—and that in a most pronounced degree—in the presence of the examiner, thus failing to render a just account of themselves. The student hoping to go to college scot-free of examinations may be, and often is, the worst offender in this respect.

k The small school, most needing encouragement, is often the one to be most discouraged by the outcome of its attempt to achieve accrediting.

The foregoing are fair examples of the weaknesses as seen by the complaining witnesses. As to the value of their testimony, my hearers must judge, and perchance, question, in the discussion which is to follow.

Among the chief benefits derived from the accrediting system, the following have been suggested.

a The stimulating influence of the visits of the examiner or accreditor, upon the community, the teachers and the pupils.

(b) The raising of standards of instruction and study.

(c) The creation of ideals of scholarly attainment.

(d) The standardizing and elevation of the material of the school curricula.

(e) The closer articulation of high school and university.

(f) The awakening of higher aims in students.

(g) The enforcing of the public and school attention upon the university and upon the general field of higher education and attainment.

(h) The more careful weighing of subject values, and of community needs.

Again, my hearers must judge, and I must pass on to the third question, that of admission by examination.

Inasmuch as the large public high schools of California are practically all accredited, the question of required entrance examinations in the case of those students who came from nonaccredited school becomes in reality largely a problem of the smaller high school. This statement may be qualified, however, by admitting its truth only so long as the standards for graduation from high school and for university admission shall remain, as is the rather common practice, two different things; for the larger high school, being accredited, practically controls the matter of university admission or nonadmission of its graduates, who know that individual merit shall be the only condition upon which their advancement shall depend. But this is not so in the case of the small school and the students thereof. The small school is quite frequently not accredited, and its aspiring graduates, irrespective of individual merit, know that nonaccrediting spells for them the necessity of taking at least some examinations, if they hope to be permitted to pursue their studies beyond the portals of the university. I have noticed with interest that my various authorities, including those California principals and teachers who have been so kind as to express their opinions to me, while in most cases commending the accrediting system, have been significantly silent with respect to the merits of the entrance examination system. From this I can draw but one compelling conclusion. Their silence must be construed as a tacit condemnation of the examination system. Add to this the outspoken condemnation of the examination system by many of my authorities, and we have an arraignment of the whole plan, to which I heartily subscribe.

Turning, then, for just a hasty glance at the letters received from California high school principals and teachers, I find that, in the main, they recognize accrediting as a worthy object, but believe it should have a much more comprehensive basis than under the present system. They

are, however, in so far as the present system is concerned, in accord with the ideas put forth in the foregoing citations.

Some of the more pointed suggestions may be of interest here.

At least two replies indicate that the writers believe that the accrediting system should be reversed, that is to say, the university should be the objective, to the end that such an effective teaching corps might be produced as to preclude the need of oversight by the university which has prepared the teaching body. Many suggest that the nonaccrediting of the smaller schools causes their upperclassmen to spend their last year in accredited schools, thus weakening even more than would otherwise be true, the personnel of the student membership, and placing the school and its teachers in an unfavorable light in the minds of the people of the district. The small school is the chief sufferer in this respect.

Others complain that the nonaccrediting of a school may give a wrong impression of the merits of its faculty. One teacher writes that she was last year in an accredited school, and considers very unjust the situation which now places her in a nonaccredited school.

That the weak teacher and the strong teacher can not fairly or justly be discriminated or rated in the brief time of observation afforded to the examiner, is a point also made by some of the complaining witnesses. I am constrained to quote, in this connection, from a late utterance of State Superintendent Francis G. Blair of Illinois, cited in a recent number of the School Board Journal.

Superintendent Blair goes even farther, and points out that the effect of the visitor may even be such as to cause an apparent inversion of the real relative merits of two teachers—one successful, the other unsuccessful. After pointing out the futility of hoping for a just judgment of power of instruction through a few hasty visits to teachers concerned, Superintendent Blair narrates the following very suggestive experience:

"Recently a person, with unusual fitness for passing upon teaching ability and skill, asked a county superintendent to direct him to a country school taught by one of his best teachers and to one taught by one of his poorest teachers. The county superintendent was not a little surprised to find that the visitor thought that the standing of the two teachers visited should be reversed. Now, the easiest explanation of the radical difference in estimates of these two teachers by these two judges is that they used different standards of measurement. No doubt that does have something to do with it, but there are several other elements.

One of the teachers was of that modest, conscientious, sensitive type which does its best work every day in the week when visitors are not present, but which is greatly embarrassed and confused by the presence

of strangers. (I have seen several such teachers develop marked cases of stage fright.) The other teacher belonged to that very small class of lazy, careless persons who show spirit and metal and mastery only when they are performing before the band stand.

One visit might not reveal the relative strength and weakness of these two teachers. Here, no doubt, is a part of the explanation of the difference in the judgment of these two experts."

Several point out that no proper articulation can be reached which does not involve as easy and unrestricted a passage from high school to college as that involved in passing from the elementary school to the high school.

One principal states that his constituency is prepared, if necessary, to institute legislative action looking to the abolition of entrance examinations.

Several feel that the sole basis of accrediting ought to be the results attained by representatives of the school attending the university.

Most of the replies testify to the stimulating effect of the examiner's visits, but several deplore the inefficiency of some members of the examining staff, and protest against being judged by such persons.

The foregoing presents the problem. What must we, or ought we, do about it?

As to accrediting *per se*, there can be but little question as to its possibilities of stimulation, particularly in the smaller schools and their contributing communities. But when the accrediting is coupled with the idea of basing university admission thereon, it may, if denied, particularly in the smaller schools and communities, work to a decidedly opposite result; creating discouragement and disgust with the school system. Accrediting should, therefore, have for its purpose stimulation and the raising of standards. It should certainly not have as an aim, covertly or openly, the tabbing or checking of any high school for the purpose of limiting its independent action, or restricting the free and easy articulation of the schools with the colleges by denying in some cases the admission of successful graduates of the school, when recommended by the principal.

Probably accrediting, if it be of schools or if, as some suggest, it be by teachers, should be in the hands of a state committee, under the direction of the Commissioner of Secondary Schools. Such a committee ought at least to have three representatives, including one from the schools, and one appointed by the state office to represent the people. Just how far the accreditation should be by schools and how far by teachers would be a problem which might safely be intrusted to such a committee. Other administrative details of this plan for a broader basis of accrediting could wisely be left to the expert judgment of the committee members.

As to the examination system, its painful story has already been told by educational leaders, better than I can tell it. It is enough to say that it should not be. If the university is not satisfied to accept the judgment of those whom it has qualified and certificated as experts, if the state can not trust those whose credentials its board of education has approved, I repeat, if such judgments, even though submitted by the weaker brethren of the profession, are not infinitely to be preferred to the faulty, freakish test of the examination, then it is high time for an educational survey to be taken to determine what is wrong with the higher educational machinery of the state.

In my own school, which is yet in its youth, and not full grown to accredited rank, I have four students who will this year graduate. They are young people of average, or somewhat more than average ability. Three of them hope to enter university and are as well qualified to pursue successful work therein as are any that I have yet had the pleasure of recommending. Two of them will have to work next summer in order to obtain funds for financing their course. If they have to study during the summer to prepare for some vague examination series which may or may not parallel the work as they have taken it, or the eleventh hour cram as they have undertaken *that*—an examination against which no principal would be ready to guarantee his A-1 products, they will probably be unable, financially, to enter for another year, even if they do not succumb to the tests, and this means some doubt as to their ever entering. This is but a typical case, in the smaller nonaccredited schools.

No such student should be denied the privilege of pursuing unhampered, the uninterrupted course of his journey—no, not even if his principal or teachers may not satisfy the particular judgment of the examiner as to teaching ability, not even if the school lacks the full and desirable physical equipment which it is struggling to obtain. If he be deemed worthy, and recommended as worthy by those who best know his work, no university in the land should shut its doors to his free access, and no university in the land which receives public aid or profits by public exemptions should be permitted to close its doors to him.

When the happy time shall be that the standard for graduation and for university admission from high school shall be one and the same, when the student shall be allowed to move on to university from high school with the same ease and informality that now marks his passage from the elementary school to the high school, when permitted entrance examinations for high school graduates shall be no more, then indeed, and not until then, will the millennium of true articulation for which we all proclaim desire, become a possibility and not a catch expression to tickle our ears and cloud our purposes.

**REPORT OF COMMITTEE ON MINIMUM REQUIREMENTS FOR
GRADUATION SUBMITTED TO THE SECOND ANNUAL
CONVENTION OF THE HIGH SCHOOL PRINCIPALS, RIVER-
SIDE, CALIFORNIA, DECEMBER 28, 1916.**

J. C. TEMPLETON, Chairman.

It is safe to say that of the 287 high schools in California, no two agree in their course of study or their requirements for graduation except by accident. The committee has a conviction that a large majority of the schools have their course of study and requirements for graduation through tradition, inheritance or caprice; and that it would be very difficult to find a rational explanation for many courses—required and elective. With the average tenure of principals two years, that of the teachers even less, little else could be expected. In a report given at Fresno last year by Principal Brownell, it was shown that of 75 high schools in the state, registering 100 pupils or less, 97 different courses were offered. An attempt to find a thread of unity through the labyrinth shown by the hodgepodge of requirements and electives in the different years makes one feel that he is in a "Jester's Palace." With such an exhibit we wonder that the business man who pays the bills, and the industrial world which is looking to the high schools for men and women with educational foundations for efficient service, are not much more trenchant in their strictures than they are. But this report covered only 75 schools, registering 100 pupils or less; if we could hear from the entire 287 we wonder what additional anomalies would be found.

As to required units for graduation there is more agreement. A majority require 16, while the minority limit to 15, the exact university entrance requirement. Some of these schools are essentially university feeders. Some prescribe three-fourths of the subjects of their courses, others one-half; a few allow aggregations of electives, with little or no reference to sequence of subjects or restriction as to years. Others offer a majority of electives but require them to be taken in such groups and sequence that their courses differ but little from the required type.

Universally, graduation is determined by a minimum required grade in scholarship. Occasionally we find a diploma that mentions moral character, but in so colorless a way that it may be taken as a stereotyped phrase of euphony, inherited from the nineteenth-century academy. This might have been sufficient when the academy and the college existed entirely for the few who were preparing for the learned professions, and the apprentice system was available for training in the trades. Now, since these two institutions have been merged into one, the high school, taking unto itself the much-multiplied progeny both of the academy and apprentice system, it would seem logical to expect

that it would succeed also to their obligations to prepare for wider study, or train for industrial service; and, following the example of the academy and the apprentice system, intelligently label its product. But it does not seem to work out in that way. On the contrary, men of affairs tell us that when they are looking for employees they pay but little attention to a high school diploma. Some say that a high school diploma counts against the applicant. In years gone by, when the master certified to the skill and character of his apprentice, it was a valuable paper, usually worth 100 per cent of its face, and its holder was in line for a job. Not so with the high school diploma. Not only is this true of the trades and industries, but the diploma will not be accepted by the university as evidence that the graduate is qualified to enter upon a college course. True, it is nominated as one of the assets but not necessarily the most important.

It would be difficult to parallel this as an industrial absurdity. The taxpayer maintains this gigantic and growing institution, requiring 4,000 teachers, who last year instructed 95,000 pupils, of whom 9,000 graduated, each at an average cost of \$500 for the four-years course, and went out with a scrap of paper that no employer would accept as evidence that they could do his work, and the university and normal school are almost as skeptical.

Now for the first time in the history of the secondary schools of California a concerted, state-wide effort is being made by the high school principals to find out what we are doing and where we are going. A year ago our commissioner appointed a committee to blaze a trail to a common goal. At the time it was thought that a judicious selection of studies of generally accepted values from present courses would provide an adequate solution, but as investigation progressed it was found that factors other than those involved in a majority of high school courses must be taken into account. The single objective of scholarship, even though there should be unanimity among school men as to required subjects, number of units, and range of electives, would not completely solve the problem. The question of character comes in for consideration both by the business man and the university. This, however, will be considered under a separate head.

Scholarship being the logical starting point in our investigation, your committee attacked the problem from three angles:

First—Mr. Hill investigated and reported upon the entrance requirements of 38 state universities, submitting a table with his deductions as follows:

ADMISSION REQUIREMENTS BY STATE UNIVERSITIES.

Alabama - English 3, Mathematics 3, Latin 3, Electives 4.

Arizona - English 3, Mathematics 2½, History and Civics 1, Science 1, Foreign Languages 2.

Arkansas—English 3, Mathematics 2, History 1.
 California—English 2, Mathematics 2, History 1, Science 1, Foreign Languages 2.
 Colorado—English 3, Mathematics 2, History 2, Science 1, Foreign Languages 1.
 Delaware—English 3, Mathematics 2½, History 1, Latin 1, Modern Language 1.
 Florida—English 3, Mathematics 3, History 1, Science 1, Latin 2.
 Georgia—English 3, Mathematics 2½, History 2, Foreign Languages 2.
 Idaho—English 4, Mathematics 2, Foreign Language 3, Social Science, including History 1, Natural Science 1.
 Illinois—English 3, Mathematics 2½, History 1, Foreign Language 3.
 Indiana—English 3, Mathematics 2, History 1, Foreign Language 2, Science 1.
 Iowa—English 3, Mathematics 2½, History 1, Foreign Language 2.
 Kansas—English 3, Mathematics 2½, History 1, Foreign Language 3, Science 2.
 Kentucky—English 3, Mathematics 2½, History 1, Foreign Language 4, Science 1.
 Louisiana—English 3, Mathematics 2½, History 1, Modern Language 1.
 Maine—English 3, Mathematics 2½, History 1, Foreign Language 4.
 Michigan—English 3, Mathematics 2, Science 1, Foreign Language 2.
 Minnesota—English 3-4, Mathematics 2.
 Mississippi—English 3, Mathematics 2½, History 2.
 Missouri—English 3, Mathematics 2, Foreign Language 2.
 Montana—English 4, Mathematics 2, History 1, Foreign Language 2, Science 1.
 Nebraska—English 2, Mathematics 2, History 1, Foreign Language 3, Science 1.
 Nevada—English 3, Mathematics 2, History 2, Foreign Language 4, Science 1.
 New Mexico—English 3, Mathematics 2½, History 1, Foreign Language 2, Science 1.
 North Carolina—English 3, Mathematics 3, History 2, Latin 3,7, Greek 2.
 North Dakota—English 3, Mathematics 2, History 1, Science 1, Foreign Language 2.
 Ohio—English 2, Mathematics 2, History 1, Science 1, Foreign Language 2.
 Oregon—English 3, Mathematics 2, History 1, Science 1.
 Oklahoma—English 3, Mathematics 2, History 1, Science 1, Foreign Language 1.
 Pennsylvania—English 4, Mathematics 2, History 1, Science 1, Foreign Language 2.
 Tennessee—English 3, Mathematics 2½, Foreign Language 4.
 Texas—English 3, Mathematics 2½, History 2.
 Utah—English 3, Mathematics 2, History 1.
 Virginia—English 3, Mathematics 2½, History 1, Latin 4.
 Washington—English 3, Mathematics 2½, History 1, Science 1, Foreign Language 2.
 West Virginia—English 3, Mathematics 2, History 1, Science 1, Latin 2.
 Wisconsin—English 2, Mathematics 2, Foreign Language 2.
 Wyoming—English 3, Mathematics 2, Foreign Language 2.

Observations: The minimum requirements for the above 38 state universities vary as follows:

English from 2 to 4 years, the median being 3 years.
 Mathematics 2 to 3 years, the median being 2½ years.
 History 1 to 2 years, the median being 1 year.
 Foreign Language from 2 to 4 years, the median being 2 years.
 Science from 1 to 2 years, the median being 1 year.

The minimum requirements according to the table listed above and determined by the median should be:

English 3 years.
 Foreign Language 2 years of *one language*.
 History and Civics 1 year.
 Science 1 year.
 Electives 8.

Second. Mr. Smith sent a questionnaire to every state superintendent in the United States and other prominent educators, and tabulated their replies to the following questions: (1) Does your state have minimum requirements for graduation? (2) Do present conditions warrant direct moral instruction in high schools? (3) Should a statement of the

character or moral life of the graduate be placed on the diploma? The following excerpt is taken from Mr. Smith's report to the committee:

"In my questionnaire sent to the 48 state superintendents, or commissioners of education, one of my questions was, 'Has your state minimum requirements for graduation from high school? If so, please state these requirements.' I received replies from 38 states. In nearly every instance a lively interest in the question was shown. Several superintendents requested copies of our committee report.

"Ten superintendents report that their states have no uniform minimum requirements for graduation. Four of these superintendents are of the opinion that such matters should be left entirely to the local authorities. The other six superintendents included in this group favor the formulation of such minimum requirements. In one of these states such requirements are to be put in effect during the present school year.

"In 11 states a minimum number of units is required for graduation. The determination as to what these units shall be is, however, left to the authorities in each individual school. The deputy commissioner making the report for one of these states, Massachusetts, states that he favors the inclusion of three units of English, two units of the social studies, and one unit of physical training.

"In 17 states certain specified subjects must be studied and successfully passed before a pupil is graduated, these requirements being uniform throughout each state. This state uniformity of minimum requirements for graduation is attained in two ways. First: Through bulletins issued from the state office definitely fixing the minimum state requirements for graduation. Second: Through a rule requiring that the curriculum of each high school be submitted to the state office for approval, it being clearly understood that such approval will be withheld unless certain minimum requirements are included in the submitted curriculum.

"In four of the states four years of English is required. The remaining 13 states require three years of English.

"Eight of these states require United States History and Civics. Three states require one unit of History, not specifying what history this shall be. Three states require one unit of History in addition to the United States History and Civics. One state requires two units of History, in addition to the United States History and Civics.

"In nine states Algebra is required. In seven states Geometry is a required subject.

"Eight states require one year of Science and two states require two years of Science. In one instance Physiology is specified as the required unit in Science.

"In three states two years of Foreign Language Study is required. Latin is specified in one of these states."

Other members of the committee have been at work and have made valuable contributions. The recommendations included herein represent a composite opinion of the committee rather than an aggregate of individual opinions, or the conclusions of any one member. No one of us got all he wanted or had to give up all that he stood for as essentials.

Third. Many teachers were consulted and their testimony taken into account.

Character requirements.

We pass now to a brief consideration of evidences of character which should be coupled with scholarship as essential to graduation. In this respect we have all sinned and come short of the dignity of our high office in that we have certified that individuals had earned a diploma of graduation when we knew that certain essential requirements, implied or expressed, had not been met. Immaturity, triviality, lack of purpose, even questionable integrity clouded their title, and still we let them by on the face of a purely scholarship record; it was easier and pleasanter to do so—the shortest route; the other way was full of snags. We did not have absolute proof of moral delinquency and salved our consciences by giving these pupils the benefit of the doubt and letting them through with a counterfeit. These counterfeits have been charged up against the system.

Some of these graduates go to college and fail. We shall probably read the reports from Stanford and California of such failures within a few days, a total perhaps of three or four hundred men and about 3 per cent of that number women. Why did they fail? We have taken some pains to find out through their classmates who made good. Some say that the high school courses are too easy. Pupils do not learn what hard work means, neither are they prepared in certain subjects; *e. g.*, Algebra, English Composition, the fundamentals of a foreign language, etc., all of which is doubtless true. But there is a general unanimity of testimony that the main trouble lies in the attitude of the individual, seriousness of purpose, application, honesty, willingness to work, etc., etc.

If all the merited amputations could be made by the university in the Freshman year the problem would be easier, but they can not. Before Dr. Jordan retired as president of Stanford University, he told us that there were many persons who entered the university, stayed the four years, satisfied all stipulated requirements, received their diploma, and went out without ever knowing what it was all about—no feeling of responsibility, purpose, or objective.

In last Sunday's papers President Wilbur was quoted as the coming apostle of the Junior College. "A large number of students," he says, "enter both the University of California and Stanford without knowing

why they go to college. The university must be relieved of this responsibility, and the relief must come through the Junior College. We must have an educational system which will get our people to have a greater respect for the truth and which will induce them to take responsibility. We are going to get that kind of an educational system and we are going to get it before long." Thus Dr. Wilbur, as president of a great university, voices the need of radical reform and prescribes the Junior College as the remedy. Personally I very much doubt its efficacy unless there are more thorough-going requirements enforced in the high school on the character side than now obtain.

For some years we have been hearing from the university on this point, but we have been disposed to resent her suggestions because, forsooth, we thought she was trying to dominate the high school. Now we are beginning to hear from our great silent partner that the high school is not justifying its cost. Business, industry, the taxpayer—all demand that we deliver better and more reliable goods. With increasing skepticism this partner has been employing our product until now he is growing cynical and is casting about for other resources more virile and effective. The present Congress will probably give us the Smith-Hughes Bill for federal aid for vocational education. Probably some action will also be taken on the recent recommendation of Secretary Baker that the federal government establish preparatory military academies in all the states for the purpose of preparing for West Point and Annapolis the best material available for these departments of the government service. Both of these movements indicate that those in power in our government do not consider our present secondary school system organically capable of fitting our boys and girls for their future obligations as factors in our commonwealth. This is not because the high school system has not adequate resources; it has, or may have if those in charge can truthfully certify that their graduates are capable of doing the grade of work that industry and the professions demand of them.

In his report for the biennial period ending June 30, 1916, Commissioner Will C. Wood makes the following statement: "A diploma of graduation from the high school must be a guarantee of something other than the fact that the pupil has spent four years in high school and made a passing mark in fifteen or sixteen units of work." The question as to what this something is is well answered by some of the leaders, both of industry and education. In speaking of the characteristics which should constitute the hallmark of a California high school graduate, Samuel Gompers, John Dewey, and Alexis F. Lange are in substantial agreement. This in substance is their answer: "An attitude toward life, an ability to see and understand problems, and utilize information and forces for the best solution of those problems—an

imaginative understanding, and such a wide comprehension of the wholeness of life that no vocation need be to them a rut." * * *

"Initiative, courage, power, and personal ability; sentiments of respect and friendship for all men and women wherever they live." * * *

"Intelligent, progressive, cooperative citizenship in the state, the nation, the world." The high school graduate should be able "to interpret labor in values of human service, and do the day's work with the joy of creative labor." If this be the goal for the high school graduate then it must be the business of the teachers to say when they have reached it. Conferences with the teachers, however, disclose a very marked difference of opinion; a majority holding that teachers should not be required to testify to anything beyond the scholarship grades of their pupils, and that we should accept their continuation in school as evidence of good moral character. It is difficult for them to see that the university, the normal school, the bonding company, and the business man demand more explicit and positive testimony. After much discussion with teachers, who individually possess superior attainments, we were forced to the conclusion that the professional horizon of many of our best teachers is too small for them to get a comprehensive view of this great problem. In ability to see how the teacher can pass on character without possible grave injustice, and a strong disinclination to take on additional responsibility for fear that their conscientious action would culminate in the loss of position, or foster a disposition in themselves to sidestep the real issues, etc., were the chief objections to an official statement by them as to character in connection with the awarding of a diploma. A minority, however, not only believe it to be feasible, but that such a requirement would be a positive resource to the school. Some of these have set about to construct a scheme for putting this policy into operation with professional safety and dignity.

One of the difficulties experienced by many business men, teachers, etc., is a misunderstanding of what is meant by the pupil's moral character. The objection to having pupils marked on moral character is the assumption that teachers do not know their personal habits or private life, home influences. They feel that to pass judgment upon moral character with available data would be unjust to both teacher and pupil.

The explanation is that an acquaintance with the private life of the pupil is not required of the teacher, nor is it necessary. It is required, however, that teachers should take note in a systematic, intelligent and professional way of the bearing of pupils toward their work, their application, regard for their obligations in matters of attendance, punctuality, attentiveness, loyalty to their school and its interests, a willingness to put themselves to inconvenience in order to

measure up to their business obligations, to do their work in a self-reliant way, or show the manhood or womanhood to take the consequences if they do not, to exercise in the class room those principles of good sportsmanship which the student bodies recognize as not only right but compelling seriousness of purpose, diligence, industry, dependability, reliability, stick-to-it-ive-ness, and thoroughgoing truthfulness in word and work. Such things constitute professional data of generally accepted importance which teachers must know in order to meet their every day professional obligations to their pupils. Indeed, no teacher has a right to hold a job who can not see such things with some degree of clearness and make estimates with practically as much fairness as they do of the pupil's scholarship. The wide-awake teacher should have no difficulty in stating professional judgment as to these qualities. A large majority of the universities call for such data as a *sine quo non* of entrance. Business firms and civil service commissions do the same. These estimates of moral character—not the sentimental type but the business type—are current in all the mechanism of business and social life; without them the cogs of the machine could not move.

RECOMMENDATIONS OF THE COMMITTEE.

With this general survey of the field, your committee begs to present its findings as follows:

REPORT OF THE COMMITTEE ON REQUIREMENTS FOR GRADUATION.

The recommendations of the committee on requirements for graduation are offered to the principals of the high schools as a basis from which the recurrent and changing problem may be worked out in each school district.

A regular diploma with a definite course indicated should be awarded the high school graduate, and in addition there should be awarded those who qualify a Certificate of Efficiency for special merit; we further suggest that moral character be considered, as well as scholastic requirements, in the issuance of this Certificate of Efficiency.

Sixteen units of credit should be required for graduation; provided that 15 units, so elected as to answer the matriculation requirements of any college of the state university, be accepted for graduation.

A unit should be considered to mean the completion of a subject of five recitations per week, or the equivalent laboratory periods, pursued throughout a school year of not less than 36 weeks, or its time equivalent. The recitation should be at least 40 minutes, and the preparation of the average pupil should approximate the length of the recitation period. A laboratory period should require double the time of the

recitation period. A half unit is considered to mean a subject of three periods per week, other conditions being the same as enumerated above, or a subject requiring five periods per week, in which no outside preparation is required.

The following scheme of standardization is recommended: Minimum requirements— $5\frac{1}{2}$ units; electives— $10\frac{1}{2}$ units.

English—2 units.

United States History and Civics—I unit.

Science—1 unit.

Mathematics—1 unit (to include Commercial Arithmetic, Algebra, or Geometry, or one year of Applied Mathematics).

Physical Education— $\frac{1}{2}$ unit (to include the elements of hygiene and sanitation).

In addition, the committee recommends that every high school course of 16 units be grouped around two majors of three units each and two minors of two units each; that where foreign language is chosen as a major a definite language be pursued for three years, or two languages be pursued for two years each.

(Signed) J. C. TEMPLETON,
MERTON E. HILL,
NELSON C. SMITH,
E. W. HAUCK,
BURT O. KINNEY,
C. M. OSENBAGH,
PAUL G. WARD,
(MRS.) H. J. SHUTE.
H. O. WILLIAMS.

A SYSTEM OF COST ACCOUNTING FOR HIGH SCHOOLS.

ARTHUR GOULD, Principal San Diego High School.

When he was in southern California two years ago, Professor Judd of the University of Chicago remarked in a conversation that the phase of public education which surprised him most in California was the lavish way in which communities of all sorts poured their money into the high schools, both for buildings and upkeep. It is true that in the past ten years, all through the state palatial buildings which would do credit to colleges have become the order of the day for high schools. Equipment has been put into these buildings which, in many cases, is the equal of that in colleges. Courses are offered with a generous hand, even though, perhaps, a very few students are enrolled in each course.

A generous public has willingly increased the tax rate to afford the necessary money to do all this. It must be said, on the other hand, that no line of business is so generously capitalized with as little accounting for the moneys expended as is this one of secondary education. Practically no attention has been given in any part of the country to the relative costs of various lines of work in the schools. Cost analysis is to most school boards and principals practically an unknown quantity. It seems to be the motto of most boards and superintendents to secure all the money possible and spend it all, and when this is spent to secure a little more next time, if that can be done. It is obvious that such a policy is the height of improvidence and would be condemned as suicidal in the administration of any business, but in school work, taxes furnish a never-ending source of income, greater or less, and the land and its improvements are always there for more taxes. Education has become a sort of fetish with the great American public, and before it they gladly lay their treasure. Requests for bonds and buildings and levies for maintenance are seldom refused.

It is true that, until the past year, we made a sort of an annual estimate purporting to be the average cost per pupil for maintaining the school. To those who have thought at all about it, however, it was very evident that this estimate was no real statement of the actual cost of educating a pupil for a given unit of time. The largest and most evident source of error, if these statistics were to be used comparatively, is in the fact that no account was taken of the original investment or of depreciation, both of which are very large items in school expenses. There are schools in this state having an enrollment of possibly 500, in which the plant has cost them a quarter of a million dollars, and there are other schools handling four times the number of students with possibly only two or three times the amount of money invested. Moreover, this report which we formerly made furnished the principal,

the superintendent and the board no analysis of the expenses within their school. This is one of the most important things that a report of this sort should do. It is just as well therefore, probably, that this item of the annual report has been dropped.

While it is true that we have reports enough at the present time, together with a few dozen questionnaires per year to keep us sufficiently busy in our spare time, I believe that it would be well worth while to eliminate some of the present reports and make some adequate report to the city board and superintendent yearly, showing in detail the cost of maintenance of the various departments based upon the unit of the pupil per year. A further report should be made to the Commissioner of Secondary Education showing the same things for the whole school. The value of such reports would never be realized unless they were summarized for the whole state, possibly grouping the schools by classes, and such a report transmitted to the principals of the schools. The classification could be made upon the basis of the numbers in the schools or, possibly, upon the population of the communities in which they are situated. I have not the least doubt that some schools are spending two or three times as much for janitorial service as they should, while others are probably so inadequately supporting their libraries that the mere sight of the average amount per pupil put into the library per year would shame them into taking some action looking to the better support of that all-important branch of school equipment. There is no doubt that an analysis of the costs in each department would show that some departments are being maintained at a cost out of all proportion to their educational value, while, relatively, others are not receiving the proportion of the available funds which they should receive. The few of us who have attempted any analysis of the cost of maintaining the various departments have found that some departments, as, for instance, Art and Mechanical Arts, are receiving from three to five times as much per year per pupil as are departments like Mathematics and History. While it is doubtless true that this discrepancy is inherent in the nature of the subjects themselves and the relative amount of equipment required for them, it none the less suggests at once the probability of equalizing more the distribution of the support of the school. An effort to inquire into the cost of maintaining the work in the various departments per pupil per semester showed that our work in Mechanical Arts is costing us \$26.16 per pupil while the work in Mathematics is costing only \$5.90 per pupil. I question whether the former has four times the educational value of the latter. In English the cost was \$6.78, in Modern Languages \$6.68, Ancient Languages \$8.47, Science, \$9.88.

It must not be thought that the labor in making out such a report is very great. Owing to the newness of the idea it is possible that the work of the first year's report would be somewhat difficult and possibly subject to error, but as one becomes accustomed to such work it need give no more trouble than does any other written report. The report for the school as a whole should show separately the total cost and the cost per pupil per year for instruction, for supervision and administration, library, janitorial and other salaried labor, repairs, new equipment, supplies, depreciation and interest on original investment. For depreciation approximately 8 per cent on equipment and 4 per cent on buildings must be allowed, interest on the original investment not less than 5 per cent nor more than 7 per cent on the total cost of buildings, grounds, and permanent parts of the plant. This general report for the schools should also show the cost per pupil per year for maintaining each department.

A more detailed report, to be made by each teacher to the head of each department, and by him to the principal and by him to the city superintendent should show specifically, in addition to the above items, the cost for instruction and supplies and new equipment for maintaining each class in the school.

Not until we begin to frankly face the manner in which we are spending our money can we be clear of the charge of using the money that is given us recklessly and of being the typical, hopelessly unbusinesslike school teacher. Not until we actually know how we are spending our money and whether we are squandering it or stinting ourselves can we go before the taxpayers and ask for additional support.

The actual handling of the figures and the summarizing of the reports can easily furnish satisfactory material for the commercial department of each high school. In this way much of the clerical labor incidental to the gathering up and summarizing the large numbers of figures, necessary in some cases, could be minimized.

It must be emphasized that reports of this sort have very little value as a basis for comparison between schools unless they are all made upon the same basis, including the same items and using the same units. The various reports that have been made by isolated schools thus far, therefore, must be used with caution because no uniform technique has been developed. It should be the business of this convention to urge a state wide movement to make these reports compulsory through the office of the Commissioner of Secondary Schools in order that they may be of real value to those who are beginning to take an interest in this important branch of school administration.

A SYSTEM OF COST ACCOUNTING FOR HIGH SCHOOLS.

C. A. HOLLINGSHEAD, Principal Santa Barbara High School.

In a letter to me accompanying a copy of his paper, Mr. Gould acknowledged himself a novice in cost accounting. After a careful study of his paper I concluded his acknowledgment was a statement of modesty rather than of fact. It is true that he has devised no system, nor did he attempt to do so; yet, beyond question, he has set forth a body of principles upon which a system may be built.

1. Referring to Mr. Gould's suggestion that some of the present reports be eliminated and an adequate report be made to the city board and superintendent, showing in detail the cost of maintaining the various departments, based upon the *unit of the pupil per year*, I would amend: I think the report made to the administrative officers, showing in detail the cost of maintaining the various departments, should be based upon the *unit of the pupil per subject*, not upon the *unit of the pupil per year*. My reason for this is that high school attendance is growing more rapidly than high school income; therefore, a more economical system of instruction must of necessity take the place of the present in all subjects conventional, classroom recitation method. There is no good reason why all students in all subjects should take the time of a teacher for five recitations a week for a year to get a credit; some subjects are of such nature as to lend themselves to the arrangement of large groups for direction and instruction, the instruction to be given only to those who need it and only as often as they need it. Under such a system each student would progress independently, many would complete a unit in a given subject in less than a year, a few would require more than a year. Under such a scheme the teaching cost would have to be computed upon the unit of the pupil per subject, as suggested above.

To fully discuss a Group Directive Method of Instruction is out of order in this connection. I shall therefore content myself by prophesying that economy will force it upon many of our high schools. At present this method is being tried out in a few schools. An article will soon be offered to the "Sierra Educational News," setting forth what has been accomplished in scholarship and the resulting economy in cost of teaching one subject.

2. The suggestion to group the schools into classes upon the basis of the numbers in school, or on the population of the community, is commendable. It must be kept in mind that no hard and fast system, covering all schools, can be devised; latitude must always be allowed for local conditions.

3. I quote: "There is no doubt that an analysis of the cost of each department would show that some departments are being maintained

out of all proportion to their educational value relatively, while others are not receiving the proportion of the available fund which they should receive." The relative educational value of different subjects merits a great deal more attention than it receives. If some of our efficiency experts could scale the value of History, Science, Manual Training, etc., the problem of apportioning funds would then be a simple matter. The general conclusion is that it is impossible to relatively evaluate the different subjects, yet, I think it were better to have an arbitrary measure than none at all. My reason is that it is easy for some departments, by nature of subject matter, to cut the cost of teaching below that of other departments. Departments should be encouraged to economize to a reasonable degree, and department heads and their teachers should be rewarded in salary for marked saving in their departments, provided the educational output is up to standard.

4. I do not agree with Mr. Gould that the labor of making out a cost accounting report, such as outlined by him, is not a heavy task. I think that the organization of schools must be changed to meet changing conditions and that when changed, the more efficiently a school is administered, especially on the teaching side, the more complicated will become the accounting.

5. I agree with the closing statement of the paper: "It should be the business of the convention to urge a state-wide movement to make these reports (cost accounting) compulsory through the office of the Commissioner of Secondary Schools, in order that they may be of real value to those who are beginning to take a real interest in this branch of school administration." May I add to his suggestion that, since true progress is always by education, never by compulsion, a committee be appointed; this committee to consist of the Commissioner of Secondary Schools, the Commissioner of Vocational Education, and a limited number of high school principals. The duty of this committee shall be to make a state-wide study of conditions, to secure the aid of the administrative experts in our various state institutions, and to investigate what has been done in other states along this line; then to devise a tentative system of cost accounting, which in the form of a report shall be submitted to this board for correction, suggestion, and approval. When the task is completed, the result is to be turned over to the State Board of Education with the request that it become a required State School Report.

THE CALIFORNIA INTERSCHOLASTIC FEDERATION.

L. L. BEEMAN, Principal San Bernardino High School.

The California Interscholastic Federation was organized in 1914. In the introduction to the constitution written by Will C. Wood, Mr. Wood says, "In many instances interschool athletic contests are positively harmful. School activities, if allowed to run wild, militate against rather than assist the development of character."

One purpose of this federation, as stated in the constitution, is to "direct and control athletics (and other school activities) as educational resources to be encouraged and fostered."

In the two and a half years since this federation was begun it has to a very great extent accomplished the purposes stated above. The federation is now in good standing and on a firm basis.

However well its aims have been accomplished to the present time, there remain other things to be done. I shall mention briefly a few things that should be done and some things that should be avoided.

First. If we are not careful, we will go too far in our legislation. We will be regulating too closely the little details that should be left to the local leagues and individual schools. We may have too much "red tape."

Second. There is danger of carrying our interscholastic activities too far. The whole business is quite expensive in time, money, and energy. We may lose sight of the real purpose of the high school. I do not think it is wise to hold state championship contests in all forms of athletics. I doubt very much if Pomona got value received for the \$500 or \$600 it cost the high school and the citizens of Pomona to bring the Woodland high school team to Pomona, even though she did win the state championship in Rugby. I doubt if Woodland feels paid for what she spent. The state is too large, it costs too much and makes the seasons for each sport too long. For example, the championship contest in football for southern California for 1916 was decided only one week ago, about December 20. Now San Diego must journey north for a final contest. I wonder if it would not be just as well, and San Diego feel quite as happy, if she stopped with the championship of southern California.

Third. We have about quit taking our athletic teams on "junketing trips," on which they will be away from home for several days or a week, play several different teams, and travel several hundred miles. No good, and much harm, usually comes from such trips. The other day I received a letter from the principal of a high school in Arizona who asked for a game with our high school. I replied that we could not consider his proposition for two reasons, first because we did not

think it a good thing, and second because we could not allow and encourage boys of another high school to do what we would not allow our own boys to do. I have frequently written letters like this to schools here in California.

Fourth. I believe we are putting too much emphasis on the winning of championships, in some cases almost by any means. I am glad to note, however, that such practices are disappearing and that coaches who work to that end are losing their popularity.

We should devise some means to bring more of our boys (and girls, too) into some form of athletics—a form not too strenuous but what the average pupil can take part. The pupils should be divided into classes according to age, size, and ability, and have more contests between schools located close to each other; we should have more intraschool contests. This will give for each school more games at must less cost. As recommended by the federation, athletics will then become more like play for the purpose of recreation. There is already a movement for an "all-pupil contest" conducted at home. I believe it an excellent thing. It will displace what we too nearly have now, athletics for a few big, strong boys, and put in physical training or physical education for every boy and girl. It will cause to be organized in every school such a department that will care for the physical welfare of all. Coaches will become physical instructors in physical education, with coaching as secondary work. They will teach physiology, hygiene, and sanitation. Playgrounds will be enlarged and all equipment necessary to care for work of physical education will be provided, the same as now provided for intellectual education.

Fifth. We are now developing better officials, but we need more of them. We must have officials who know the game, know the rules from an official's standpoint, and above all, who will enforce them strictly and impartially. Nothing is so demoralizing to the game and the character of the boys as poor work on the part of the officials.

Sixth. We must have a higher type of coach. The coach is much better now than a few years ago. We have some very fine men. But the coach who drinks, smokes, and uses profanity, whether with his boys, or alone, who works to win, and win by any means; who teaches his boys how "to put the other fellow out"; who "dopes" his men before they go into a game; who starts men in races to foul other men; who insults officials and others when his boys are penalized for violation of the rules and accuses the officials of robbing him of the game because he did not win by a score of 75 to 0, instead of 68 to 0, and the coach who can not take a defeat as gracefully as a victory, needs the application of a heroic remedy. This it is the duty of the

principal to apply. It is the duty of the principal to know what the coach is doing, what his boys are doing, and apply remedies as needed.

Seventh. I think there is a need for a change in the dress of boys on the athletic field, and I believe now is a good time. Too many boys, especially in basketball and track, are not dressed properly to appear before audiences of both sexes. I would remove all spikes from all athletic shoes. What if they can not perform quite so quickly? They will perform much more safely to themselves and their friends on opposing teams. Especially is there need for removing spikes from baseball shoes. During the past nine years some boy has been seriously hurt on our baseball field every year. Some of these injuries have been purely accidental, while others appeared very much as if intended.

Eighth. There is room for the improvement in the conduct of students and citizens toward other schools. Disrespectful, uncivilized, insulting yells, remarks, jeers, and insinuations calculated to confuse players and officials should not be tolerated. Such conduct has diminished greatly during the last few years and should be unknown in a few years. The principal is the one person who can bring about these needed reforms. When these problems in connection with athletics are solved we will have solved many of the problems of interschool activities, and athletics and other school activities will have become real constructive educational forces that develop character.

THE CALIFORNIA INTERSCHOLASTIC FEDERATION.

T. S. McQUINCY, Superintendent of Schools, Watsonville.

In some particulars, I do not look with favor on the C. I. F. Respect and admiration are due the leaders for their energy and devotion and for many of their accomplishments. But it appears to me that a serious mistake has been made in making state-wide competition the basis for schedules and in making state-wide championship the goal for which every ambitious high school athlete is to strive.

A word of explanation is due as to why our worthy commissioner placed an anti-Federalist on this discussion. I did not ask for his reason, but I am going to make his apology. It chanced that I live and work in that most beautiful of California's beauty spots, the Monterey Bay country. As you know, Nature has reared back of our lowlands a barrier of rugged mountains. These serve to protect us from the chilling winds of conservatism from the north and also from the hot blasts of progress from the south. Through the few passes that give us entrance and exit, only the most temperate breezes are allowed to blow. Thus far even the Federation breeze has not gained entrance. The commissioner wished you to hear from one who works on, untouched by this last named climatic disturbance.

In the Monterey Bay region some twelve or fifteen years ago there was organized the Coast Counties Athletic League. The schools there have worked under this league continuously since its organization, and they have had little difficulty as compared with schools under other leagues. This may account, in a measure, for our slowness in joining the larger organization. We have, however, had difficulties, some of which we consider serious. The most serious problem has been the evil attendant upon sending our boys on long trips. We have felt the meagerness of the supervision that the school is able to supply in such cases. To combat the evil, we have restricted trips to a maximum of one day, and have so far as possible increased faculty supervision. Even now, we have difficulties on this score, but they are neither so numerous nor so serious as when trips required overnight absence from home. All of the principals of the C. C. A. L. are, I believe, a unit in looking with disfavor on longer trips than those now allowed.

A second evil that we have encountered, though in this I do not wish to speak for the entire league, is the exaggeration of the spirit of competition. This has been so pronounced at times as to produce individuals, and in some instances, teams, that were professional in all except technical definition. This evil has been to some extent overcome by long and earnest training, a careful nurturing of the spirit of fair

play and sportsmanship, and by restraining continually the competitive instinct in so far as it leads to winning at any cost. This tendency toward professionalism, I can not but feel, must be fostered rather than discouraged by the tremendous incentive of state-wide championship.

Friendship between schools I believe to be a further restraining influence upon the professional spirit. This, in my opinion, can only exist between schools situated sufficiently near one another for real acquaintanceship to exist between both students and teachers. The mere fact of the contestants being utter strangers would seem to make necessary a professional spirit. Under the C. I. F. schedules contesting schools may be separated by the length of the state.

We know that back of this movement is a greater question than either your experience or mine. The question of the value of interschool athletics is involved. Its value to the athletes and its value to the much larger number of nonparticipating students is being more and more seriously questioned. We all acknowledge that everything in connection with public schools must be both educative and democratic in character. We know that in athletics, as they are generally conducted, the educational value is most dubious, and further, that whatever value may result accrues only to the few who are most physically fit. President Foster, of Reed College, does not hesitate to arraign seriously our whole system of high school and college athletics. We may not agree with President Foster in all of his particulars, but his ground is sufficiently well taken to give us reason to hesitate before introducing into our high schools factors that we know are dangerous.

Some of my C. I. F. friends have assured me that I am "all wrong." An ardent advocate of the Federation told me that he wanted not only state-wide competition, but also nation-wide competition. He even assured me that he looked forward to the time when we would indulge in international high school athletic contests. I do not believe that this man voiced the sentiments of the leaders of the C. I. F., but he did, however, point out a danger. More conservative men have told me that the C. I. F. is a panacea that may be administered in doses to suit the individual sufferer. They tell me that a school can stop in the competition anywhere that it may desire. Such a procedure would be easy but unsportsmanlike for a losing team. For a winning team it would be difficult and Tantalus-like in its cruelty. Still more conservative men tell me that the C. I. F. is simply an earnest effort at systematic, well directed and uniform control. With this aspect of the work we must all agree, but why couple it with the extravagance of state-wide competition and championship? I talked the question over at the very beginning of the C. I. F. movement with some of the

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strongest men in the Federation. They acknowledged the absurdity of the extent to which the Federation would carry adolescent boys in their athletics. One, with a shrug of his shoulder, remarked, "We have it and must make the best of it." I believe that they have more nearly made the worst of it. No acknowledged evil should be sanctioned by the Federation.

Bishop Brent has said that the destructive critic is simply a "knocker." He gives absolution, however, to the destructive critic who tries to be constructive. To save myself from falling into the knocker class, I make this simple suggestion: Let us keep the Federation with all of its many good qualities, but let us have the Federation forbid competition beyond the minor league. Let us even have it limit the size of the league to not more than five or six schools and limit the number of contests that may be participated in during a given season by any one school. If more than the joy of winning is needed for the victorious team in a league, state recognition in the form of pennants or banners might be given. By this simple process, the C. I. F. could be made an educational factor deserving the support of every high school in the state, and that support would not, I believe, be long delayed.

MILITARY DRILL IN THE PUBLIC HIGH SCHOOL.

By JOHN F. ENGLE, Principal, Placer Union High School, Auburn, California.

Military drill demands and enforces implicit obedience. The adolescent must take his place in the line at the word of command. He must shift his weapon, without error, from one position to another and in perfect unison with all the other members of the group. He must hold his body in a certain definite position at the same time that he correlates actions with other members of the group. He is actually made to realize that the whole is greater than any one of its parts.

Compulsory military drill is intensely democratic in its tendencies. The son of the millionaire stands shoulder to shoulder with the son of the day laborer. Each receives exactly the same treatment; each must obey implicitly the same orders. No leniency can be shown to the one or the other. In successful military drill the ensemble must be perfect. If one boy in a company fails to perform in unison with all the other members, he mars the whole performance; that is, he ceases to be democratic and becomes for the time being an anarchist. Democracy must mean more and more mobilization, cooperation, and the inclusion of individual effort in the wider purposes of organized society.

Military drill in the high schools foreshadows the wider economic organizations of adult life. A nation that encourages anarchy in industrial life will fall behind in the mighty race soon to be run among the nations of the earth for industrial supremacy. When the present European war ends, industrial activities will be given an organization and an impetus undreamed of and unheard of by the thinkers of a decade ago. The urge is upon us; the stress is here. We must begin now to accustom our boys and young men to group action, to concerted movements and to a more cheerful recognition of larger initiative in governmental action. In the great battle for economic supremacy we have no choice, we can not stop and cavil. We must develop the highest type of group activity or we must take a second or third place because of our inherent stupidity.

Conventional military drill combined with the system of bodily exercises, recommended by our war department, constitutes, in my opinion, the finest and completest system of physical culture now known.

The subject of patriotism in the public high schools demands more than a passing notice. No people ever yet achieved greatness who did not believe in themselves. To teach the truth in regard to history is one thing; to belittle and sneer and muckrake is quite another thing. Our military history can truthfully be presented in such a way as to disparage militarism. The military history of such great men as Washington and Grant and Lee, when truthfully presented, arouses peaceful

sentiments rather than warlike desires. Patriotism is solidarity; patriotism is a feeling that the whole is of more importance than the parts. The patriot revels in the present, rejoices in the past and looks to the future with hope and pride. True patriotism is synonymous with duty, bravery and moral and physical courage. High school boys should be taught to love the flag, to revere our great men and to know and appreciate our great and splendid country. High school history teachers who are pessimistic, whose minds are filled with isms instead of the facts of history, and who are cynics, should be peremptorily dismissed from the public schools.

It is charged by some that military drill in the high schools will instill into the minds of boys ideals of wholesale murder and aggression, and that this exercise will make them too fond of destructive weapons.

Surgeons, who wield the knife and scalpel on the human body, are not more bloodthirsty than other men. Soldiers who have participated in battles are afterwards nearly always men of peace. The makers and sellers of destructive weapons are not distinctly warlike. The most expert pistol shot I ever knew would not even shoot a ground squirrel. The manufacturers of dynamite do not, for that reason, play the role of dynamiters. The most expert rifle shot I ever knew seldom used his skill in hunting for wild game. Expert boxers are rarely, if ever, quarrelsome. Skillful swordsmen do not take delight in running people through.

The man who charges that compulsory military drill in the high schools instills ideals of wholesale murder and aggression is, to put it mildly, delivering himself of reckless assertions. Military drill for high school boys does inculcate obedience, system, regularity, the art of self defense, honor, and the noble virtue of cleanliness. Careful instructions are given in the splendid art of rendering first aid to both friends and enemies. Physical endurance is developed and boys are taught by precept and example the noble art of self reliance.

You can not divorce duty and courage from danger and daring. The fireman, when performing his simple duty, is in the midst of danger, and may be confronted by death. The person who walks fearlessly and righteously is daily in the shadow of hatred and enmities. The man who puts duty first is more likely to experience safety first than the one who works only for safety first.

The adolescent who pores over books in which battles are brilliantly described and military heroes held up to fame, might experience a harmful stimulation of the imagination. Military drill, on the other hand, forces our adolescent to cease dreaming and to confront realities. Actual and strenuous military drill destroys the glamour of the man on horseback and of charging squadrons. In the first instance distance lends enchantment to the view; in the second case nearness disillusion-

izes. Ideals are corrected by facts; experience is the last word in character formation, and the true tester of all ideals.

To make a summary: compulsory military training in the public high schools induces mental concentration, enforces cooperation and group movements, inculcates democracy, affords excellent and comprehensive physical training, enlarges the true art of self defense, places the sons of the poor man on the same plane as the sons of the rich man, and develops in a very definite manner the art of bodily expression. Compulsory military training, through hard drilling and strenuous marching, corrects the bizarre ideals of adolescent life, obtained from reading sensational military history. It enforces obedience, system, neatness, regularity and cleanliness. The noble art of conduct is closely associated with standing attitudes and bodily position, with commands given and commands received, with mutual forbearance and reasonable aggression. All of these things come to the surface among boys in compulsory military training.

Rich parents will, in the future as they have in the past, place their sons in private schools where compulsory military training is required. The public high schools must enforce military training so that the sons of the toiling millions may be placed on an equality with the sons of the rich.

If only the sons of the rich are skilled in the use of defensive weapons, they will tend to become a dangerous and undemocratic caste. The only way to remove this danger is to democratize military training.

The organization of only a part of the boys in a high school into a cadet company or cadet companies, is, in my opinion, unwise, undemocratic, and might be fraught with danger to the internal harmony of the school. An exclusive cadet company in a high school might approximate unto the evils of a high school fraternity. The only good reason for organizing a part of the boys in a high school into a cadet company or companies, is the fact that later on it will lead to the inclusion of all the boys in the company or companies. Let me be emphatic: if military training is introduced into the public high schools it should be made compulsory upon all boys.

National preparedness is the most comprehensive question affecting our personal existence and our public welfare. We are living in strenuous and bloody times. Half the world is on fire. If the conflagration now raging in Europe should be extinguished, who knows but what it may soon burst forth again in some other part of the world? Men have longed for universal peace and sung the paeans of brotherhood for two thousand years. For three hundred years every great war, according to certain thinkers and philanthropists, has been the last; and still they come. Eastern Europe is today filled with half drowned nations. For many generations these peoples have struggled to keep their heads above

water. They wanted breathing space. Now they are desperately demanding standing room. They will have it, and will have it now; but they will not have it now nor in the future without trouble. Territorial aggression and trade avarice cause wars. These two motives will act in the future just as keenly as they have in the past.

We should be prepared. No man can foretell the day nor the hour.

If the spies of foreign nations could report that the United States has all the time from five to eight millions of men who have had four years of military training, it would have a most salutary moral effect upon any nation contemplating military aggression against us.

Military instruction in the public high schools possesses high educational value; it also prepares the boy to help defend his country. Educational values are important; national defense is a tremendous necessity.

SHALL MILITARY TRAINING BE MADE COMPULSORY IN OUR HIGH SCHOOLS?

W. A. DORON, Williams, California.

My attitude on this question is best expressed by saying that I am opposed to compulsory military training except under cases of very extreme necessity. That I can conceive of no cases wherein this necessity would involve pupils of high school age. That compulsion in the high school on any account is contrary to the best ideals of high school management. Hence my paper is intended to be an argument against compulsory military training in general, in the high school in particular, and specifically in favor of the, "I ought," or "I should," that so many high school principals try to instill in the minds of their pupils.

We are living under a constitution established by the people of a democracy. One of the fundamental reasons for the adoption of that constitution is stated in the preamble to be "to provide for the common defense." That is the most righteous reason ever given for the establishment of an army and navy.

Up to the present the volunteer regular army, the militia, the navy, and in times of special danger a volunteer army and navy have been ample for the common defense, and at each and every time when the test came these agencies have been found effective not only for the common defense, but likewise for the suppression of rebellion, the acquisition of some additional territory, and the protection of neighboring states from the hand of oppression and insurrection.

This condition has existed for more than a century and a quarter and the achievements under it have, in the sum total, been a safeguard to the common defense of the people of the country for whom the constitution was established. In other words, the provisions made for the common defense have been equal to the conditions under which we have been living for more than one hundred and twenty-five years.

Now, from some source comes the warning cry of admonition that our present provisions for the common defense, or rather our present plan for preparing for it, is not adequate to the existing world conditions or those that we are facing in the immediate future.

Whence come these alarms and warnings?

Three sources may be mentioned as their origin.

First—Patriotic people who have studied world conditions together with our own provisions for coping with them may have arrived at, and proclaimed the proposition that our present provisions for the common defense are not adequate and that compulsory military training is an immediate necessity and should be substituted for our volunteer system.

Second—The proposition may have originated with people having financial gain or selfish motives in view.

Third—It might have had its origin with that class which is always anxious to be in the limelight and know of no better way of getting there than by everlastingly finding fault with things as they are, and making themselves conspicuous by eternally crying change, with the hope of making some people believe it a synonym for patriotism.

Which of the three is responsible for its promulgation is beyond the scope of this paper to determine. It can be stated, however, with a reasonable degree of certainty, that it originated with one of the three or a combination of the second and third. The source of a proposition frequently reveals the reason for it.

Regardless of its origin we are face to face with the proposition and it is our duty as good citizens to calmly and critically examine it on its merits. Isn't it strange that a subject whose study creates non-producers should be made the only compulsory one in our high school?

Fully realizing that precedents should not control us in our actions for the present or future, yet, we believe they may guide us in determining what may be best for the present and future. With this in view, let us compare briefly some of the results of the volunteer system of military training with those of the compulsory system.

In view of what was said at the outset of this paper concerning what the volunteer system has done for the United States for more than a hundred and twenty-five years, it is unnecessary to review it here. We have then to examine the results of compulsory military training in countries where it has existed in order that we may contrast or compare the two systems.

Germany has had compulsory military training of the highest type. What have been the results in so far as the common good, or even common defense of Germany is concerned? The system has driven thousands of her best citizens to seek homes in other lands. The system has given rise to a philosophy and teaching which is dangerous, pernicious and false. As an outgrowth of the system we have General Bernhardt proclaiming in his work, "Germany's Next War," published in 1911, that it is both the right and duty of Germany to make war. Right, for expansion, and duty, to impose on the rest of the world her own superior culture. Such teachings by Bernhardt and many others of equal eminence coupled with compulsory military training plunged Germany into the present struggle and made necessary a world war. Did any volunteer system ever bring on such a calamity? It is true, in the opinion of mankind, that the volunteer system has prevented many a calamity. I doubt if it can be shown that compulsory military training ever prevented one. It surely has brought neither peace, prosperity, nor happiness to a single nation where it is adopted. Have the results been beneficial to Germany? Has the German system produced for her, results comparable to those which our system has produced for the

United States? Because of the pernicious system of militarism, Germany is threatened with annihilation as an independent state.

Do results show that compulsory military training is a better guarantee for the continuance of a nation than is voluntary military service? Do present or past world conditions suggest an answer in favor of the compulsory system? Surely they do not.

The Swiss system is pointed to more than any other as the ideal one for the United States. Switzerland is held up by many with the assumption that she maintains her independence among nations by reason of her military system. Switzerland does not maintain her autonomy among nations by reason of her military system, but for the very obvious reason that no nations of Europe will allow any other nation to appropriate her.

France or Italy and many other nations could subjugate Switzerland in spite of her compulsory system of military training if other nations would allow such a condition. Yet Switzerland continues to call forth her sons in military array just as though it were necessary for her existence as a nation. The chief efforts of her soldiers are to see that all train.

Is it not a fact that compulsory military training is and has been the direct cause as well as reason for the annihilation and threatened destruction of European states? No other agency can begin to compare with it as a cause for the war conditions now existing.

The best argument ever adduced for compulsory military training is found in the unfair conditions accompanying the volunteer system. Or in other words, the volunteer system places the burden on the willing and the brave and leaves the unwilling and cowards at home. I am willing to admit that there is good ground for this comparison, but I am not willing to admit that it is sufficient reason for discarding a successful plan for the adoption of a plan that has and is proving a failure in instances where it has been adopted. The unfairness of the volunteer system is antagonistic to the American standard of justice, but if you will investigate you will find the compulsory system, as it is administered, honeycombed with unfair practices. You will find that caste, and political and army influence, decide the station the young men are placed in when entering the army under compulsion. It does not take a very great stretch of the imagination to see that wealth and political influence will determine the status of the American boy if compulsory military training is ever enforced here. Indeed, the only time compulsion, or the draft, was ever instituted in the United States, it was tainted by the fact that he who was drafted might for money hire a substitute. So do not think that the volunteer system is the only one which has unfair features in it.

One of the favorite arguments for enforced military training is, if a person is compelled to pay taxes in support of the common government, why should he not be forced into military training that he may be prepared to defend his country.

Taxes for the common support and forced military training in order to be prepared to defend the country, are not analogous in any particular. In the first place, nobody is forced to prepare to pay taxes. In many instances we are not even forced to pay taxes. Internal revenue, for instance, is largely a matter of choice. If you choose to use these things on which a revenue is placed you pay the tax, but nobody forces you to use them, neither is there a penalty attached for refraining from using them. But how about municipal, school, county, and state taxes? There was a time when government incarcerated the body of a person who refused to pay such taxes. Now the property is taken in default of payment. In case of enforced military training, what think you would be the penalty for refusal to comply? Evidently incarceration of the person in some form, for if confiscation of property were the penalty then he without property would be exempt and unfairness would result. Then, in so far as penalty for noncompliance in the two cases is concerned, they are far from being analogous. In reasoning from likeness, things must be analogous in order to form the basis for an affirmative conclusion. If not, a fallacy is the result, and such is the result of comparing enforced military training with our system of taxation. But a part is given in taxes, while the whole body, mind and soul is surrendered for someone to command when compulsory military training is enforced.

Thus far we have tried to contrast the volunteer system with the so-called militaristic system. But I hear the advocates of compulsory military training in the high schools claiming that it is only for preparedness, and not militaristic. In the sense of the old adage, "they intend to pull the trigger easy and thus lessen the force of the discharge," "It can't be done."

In case enforced military training is engrafted on the high school, what will be some of the conditions which must be met? Either one of two plans must be adopted in order to be fair with the boys of the required age to take the training. Either all boys of the required age will be compelled to attend high school, or some plan instituted for equal training for those who do not attend high school. If the first alternative is adopted, then age, and not training, will be the requirement for admission. We will all agree, I think, that such a state of affairs is not desirable. Enforced military training in the high school is a step, and a long one, in the direction of making the United States militaristic. After having forced the American boy to take military

training, it follows, in my judgment, that you will have to force a great number when they are needed on the firing line, and these who need no forcing will be willing and anxious to go to war for trivial causes—for instance, to adjust the internal affairs of other states, which, in the opinion of many, is meddling with that which is none of our business. This is thrown in as a mere suggestion to call up many more trivial causes which might call us to war under misguiding leadership, if we had a vast army of compelled-trained soldiers. This is not a question of whether we should be prepared, but rather a question as to the method of preparedness.

Our high schools could render a far greater service to our country and the world by giving systematic attention to the question, how to avoid war than to the question, how to conduct war. The question before us contemplates teaching how to do a thing which should not be done. But some one replies, war has been, is now, and forever shall be. It would go far to eradicate it from the future if all boys of high school age were to study world questions and conditions with the idea of preventing them from bringing on war. The old adage, "an ounce of prevention is worth a pound of cure" has never yet been successfully contradicted. We all agree that war is nothing less than what General Sherman called it, and yet some are asking the state to compel boys in the high school to learn to raise it. Don't they raise enough of that without being compelled to learn how?

We all condemn such paraphrasing as is done by Nietzsche in his book, "The Deeper Causes of the War." Here is his sample of what runs through the minds of those who think war and at the same time try to be honest: "Ye have heard it said of old, 'Blessed are the meek, for they shall inherit the earth;' but I say unto you, Blessed are the valiant, for they shall make the earth their throne; and ye have heard men say, 'Blessed are the poor in spirit;' but I say unto you, Blessed are the mighty and free in spirit, for they shall enter Valhalla. And ye have heard men say, 'Blessed are the peacemakers'; but I say unto you, Blessed are those who make war, for they shall be called, not the children of Jahv'e, but the children of Odin, who is greater than Jahv'e."

We condemn, I say, such talk as that, while the fundamental command for all mankind, "If an enemy smite thee on one cheek, turn the other also," is to continue to be replaced by the command: If you think an enemy may smite you sometime in the future, be ye prepared to smite him back. Is it not about time we quit being hypocrites and practice what we teach and teach what ought to be practiced instead of what should be avoided?

Our thoughts make us what we are. "As a man thinketh in his heart so is he." Just as sure as you set boys to thinking, and the high school

is supposed to do that, you control his life in so far as the thought you succeed in generating is concerned. If you induce the boy to think war is the road to honor and distinction you stir within him a desire to travel that road. Military drill with the gun teaches how to handle the gun, not the body.

Until our volunteer system fails to produce the state of preparedness deemed safe and sane, let us use that system. When it fails to place us in a state of preparedness for the common defense, then will be the time to talk of some other system. When patriotism becomes a thing of the past, when the call of duty fails to arouse the American citizen, and when the ideals of self government cease to appeal to him, then forced service will be called into action for a time by those who happen to be strong enough to command it, and our system of government, the best ever devised by man, will no longer exist.

If military training were made one of the subjects for instruction in the high schools throughout the land on the same basis as any other subject, and provision made for proper instruction when a sufficient number desired it, there would be no trouble, in my judgment, in getting an efficiently trained military force in so far as the high school is able to furnish it. This has never been tried except in isolated cases, and in these, I am advised, has been highly successful.

There is no good reason for our government to inaugurate a compulsory system of military training in our high schools until the volunteer method has been given a fair trial at least.

No one gives his best under compulsion. Most Americans are willing to give their very best when duty calls.

Chaining soldiers to the guns would provoke disaster in the American army. So compulsory military training for boys of the high school who have aspirations for useful lives would be a serious menace to the legitimate aims of our high school system.

THE POSSIBILITIES OF THE INTERMEDIATE HIGH SCHOOL IN UNION AND COUNTY HIGH SCHOOL DISTRICTS.

MERTON E. HILL, Principal Chaffey Union High School, Ontario, Cal.

In presenting this subject today I am conscious of the fact that I have had no share in the intermediate high school movement, but as I am to discuss "Possibilities," I shall be pardoned for any failure in presentation from experience. I have based what might be termed the authoritative part of my discussion on a fund of well-written articles that have appeared during the past few years in various educational magazines. In "Education" for October of the present year you that are interested will find over seven pages of bibliography on "The Junior High School." I have used this bibliography quite widely. I have studied somewhat the administration of a typical California intermediate high school. I have sought out the best thought among current educators, and what is presented briefly today can be made the basis of constructive educational work throughout the rural and part of the urban area of the great state of California.

It is a mistake to think that the intermediate high school idea is new. Without the name, but with the main features existing, such schools have been in existence here and there for years. Kalamazoo, Michigan, has had such a school for twenty-five years; several other cities for about twenty years; and Fresno, California, for about fifteen years. During the past decade there has been the rapid development of the junior high school movement, and today there are probably more than three hundred such schools in the United States. The intermediate high school idea has impressed education nationally. In "Education" for September of this year, there is published a list of two hundred eighty cities and towns of the United States that have these institutions. Only nine of these towns are in California, although there are a lot of intermediate high schools of California not listed.

The fundamental ideas regarding the junior high school have long existed in California. Back in the middle nineties I passed from the sixth grade into a room apart from the rest of the elementary school. Into this room were gathered the seventh, eighth, and ninth grades; many of the subjects taught were "secondary" in type. I graduated from this school while former Superintendent F. F. Bunker was principal; perhaps from this experience he got some of the ideas that later led to his introduction of the intermediate high schools into Berkeley. Later, after I had gone through the normal school, I taught as principal in two different rural schools where I had the privilege of having a ninth grade with two or three other classes in a separate room. My ninth grade course of those years included General Science, Algebra, Latin, and Ancient History. Since those days, a little over a decade

ago, the union high school project has been so successful that the ninth grade has dropped out of the grammar school, while the seventh and eighth grades in rural schools are still under the close domination of county boards of education.

There have been two main reasons why boards of education in cities and towns have established intermediate high schools. 1. Congestion in high schools and in the elementary schools of certain systems have demanded readjustment. In this particular the intermediate school is "an administrative device" to bring about a financial saving. A number of towns made changes along this line to obviate the necessity of further building. 2. The real reason that will stand the test of futurity is that the intermediate school is an educational device that makes possible the "segregation of adolescents into homogenous groups." This makes possible a necessary reorganization of the course of study for the early adolescents.

Wherever these institutions have been established there have become noticeable many advantages. I wish to go into detail with these advantages, for they have an important bearing upon the question under discussion. These advantages have been stated clearly by three men, and I can not do better than to give you an abstract of their testimony. Professor Lull in "Education," Vol. 30, pp. 22, 23, advocates the intermediate high school for—

1. "Pupils of the seventh and eighth grades will be under the care of one corps of teachers who have a unity of purpose."

2. "Boys and girls will have started on their way toward a new goal before the changes of adolescence take place."

3. "The high school teacher can better understand ninth graders."

4. The plan "extends fundamental culture lines of the present high school down through the eighth and seventh grades."

5. The plan permits the pursuance of a definite group of subjects long enough for students "to become grounded." Many believe with Professor Lull that "the fundamental culture lines represented by literature, language, history, science and mathematics should start with the seventh grade and continue in closely articulated courses throughout the high school."

Professor Wheeler in the Educational Review, Vol. 21, p. 245, suggests similar advantages. He argues that the intermediate high school—

1. "Fits the work more closely to the pupil," thus preventing elimination.

2. "Shifts to a less dangerous period the change of schools."

3. "Provides easy transition from the one-teacher regime to the departmental plan."

4. "Provides a definite period in which interests and aptitudes may be tried out, thus lessening the number of educational misfits in the higher courses."

5. "Tends to reduce waste in the matter of equipment and teaching force."

Mr. Joseph Abelson in an admirable article published in "Education" of September of the current year, further presents the advantages: The plan—

1. Makes possible the "discovery of the capacities and needs of the pupils."

2. "Prevents unnecessary retardation of pupils, for promotion is by subjects and not by grades."

3. "Prevents student mortality at the close of the grammar grades."

4. "Begins secondary education with pubescence."

5. "Prevents waste of time."

6. "Bridges the gap between elementary schools and high schools."

7. "Reduces the number of educational misfits."

8. "Results in a better grouping of pupils; hence better discipline."

It has been demonstrated beyond a doubt in scores of school systems that the intermediate high school is a good thing, that it is actually fitting the needs of society, that it enlarges the educational range of thousands of early adolescents, and that it is based upon sound pedagogy. If this institution is practical for the largest cities and also for the small towns; if it fills a much felt need in the general educational system; there is no question but that it can be adapted in union and county high school districts; and the idea at least can be followed out in many remote rural schools. I realize that my presentation would be incomplete if it does not present in detail a flexible, and at the same time workable, plan that will meet conditions as they exist in California. I shall recommend a plan that if followed out will insure in a much broader way than at present the retention in school of a much greater number of adolescents, and at the same time this plan will present possibilities of instruction much better adapted to boys and girls in their early teens.

The plan contemplated requires little or no change in the present law; what the cause needs is encouragement and leadership of county superintendents, the various county boards of education and of the State Board of Education and high school principals. First of all there should be a reorganization of the course of study for the seventh and eighth grades. This reorganization should be state-wide; it should make possible in rural schools and in all other schools the elimination of a certain amount of instruction that is time-honored, but that has nothing else to recommend it. There should be substituted for this what might be called adolescent subjects that fit the needs of the individual.

and that will awaken in him a vision of his possibilities. I would restore to the remote rural districts that are too far removed for transportation to a larger center a new and renovated ninth grade; and I would further give to such districts that maintain such classes their proportion of the apportionment of state and county high school funds. The subjects given in such a school would follow the needs of the rural life; but they should be a blending of the practical and the cultural. This policy would lead to the discovery of "Full many a gem of purest ray serene."

The second type of school is already in existence in several towns of California. All the seventh and eighth grades of a small school system are grouped together to form a unit—an intermediate school. This sort of school has been in existence in Orange for several years, and it is a fine school. It has been organized this year at Colton, and there are doubtless many in the state. The course of study has been reorganized to include several secondary subjects, departmental teaching obtains, and there is promotion largely by subjects, instead of by grades. There seems to be only one trouble with this sort of school; it doesn't keep together in one homogenous body the early adolescents. But this organization is preferable to the old, and it is a decided step in the right direction.

The third type of school does not yet exist in California, so far as I know. It is the splendid union intermediate school of the future, and it is going to make its appearance very soon. When it comes, the rural communities, or most of them, and the smaller towns will have as fine school systems as the larger cities; and the country boys and girls will have as admirable opportunities for continued education as their city cousins now have. This new school will be a *union intermediate* of two sorts. First, it will be a reorganization of all the schools in the present union and county high school districts. At the base will be the various elementary schools, completing their elementary courses in six years. Next will be the union intermediate school. The boys and girls from the various elementary school centers will be sent to a centrally-located intermediate school, transportation free. In this school will be assembled the early adolescents, and there will be planned a four-year course to include all grades from the seventh to the tenth, inclusive. This will leave the present union high schools without the two first years, but with the junior college classes added. In many cases the present high schools would be greatly benefited by such a change.

In rural areas where we do not now have union high schools I would have a similar union intermediate institution. I have been up and down the great state of California by auto, and I am convinced that there are

many rural areas that can practically establish such a union school. Let me illustrate what I mean by the following diagrams:

(Here I present several maps showing a number of grammar school districts not in union high school districts. Districts are located on a circumference, with perhaps a schoolhouse near the center. This shows the probable location of an intermediate school.) The grouping of such schools might very well be left to the County Superintendent of Schools, or perhaps to the County Board of Education. There should be kept constantly in mind a periphery of elementary schools with an intermediate union near the central location. In some instances present elementary schools might be used as the basis, but more often a new intermediate, modern in every particular, should be established. In every instance the union intermediate school should possess a large campus of not less than twenty acres.

The aim of this school should be: First, to centralize rural life; second, to enlarge the vision of opportunity of all adolescents; and finally, to extend upward the range of educational choice. There should be in this school the best possible teaching force; enough teachers, so that there is one for every twenty pupils. The teachers should be grounded in sympathy for the adolescent. They should be young (not necessarily in age) and virile. They should be of exemplary conduct; their life must ring true. Finally they must be qualified by scholarship and experience. There should be buildings and grounds suitable for classroom instruction under the most wholesome conditions. There should be laboratories for elementary science, shops of the sort that the boys will later enter, and modern domestic science rooms. There must be gardens and agricultural space suitable for pursuing community agriculture on a reasonable scale. And there must be an auditorium where the adults of the community can get together for community projects.

The new course of study should be based upon a knowledge of the fact that some of the boys and girls will continue through high school and college, while others must soon stop and enter the field, the home, an industry, or a business enterprise. This being true, the intermediate school should be a place for "range finding," but it must also be a place that definitely leads somewhere. It must lead some to high school, and direct them ever onward into the realms of scholarship, into the world work of professions and statecraft; but it must lead others into technical shops, or into the commercial schools; and further, it must lead others out into the activities of life with a better training than of old for immediate use and future need.

THE POSSIBILITIES OF THE INTERMEDIATE HIGH SCHOOL IN UNION AND COUNTY HIGH SCHOOL DISTRICTS.

W. E. HESTER, Principal, Turlock Union High School.

I have chosen to discuss the question, The Possibilities of the Intermediate High School in Union and County High School Districts, under four main heads. First, the possibilities for the intermediate school in thickly and sparsely settled districts; second, the possibilities in the intermediate school which meet the needs of the pupil and the requirements of the age; third, the intermediate school may be the entering wedge or the stepping stone to better educational and administrative possibilities; fourth, that there is certain legislation which is necessary in order to carry these possibilities into effect.

The possibility for such a school in thickly populated districts is very encouraging. There are 35 or more union high school districts, according to replies to my questionnaire, which have sufficient pupils to warrant these districts in establishing the intermediate school. In many instances the country schools are in a crowded condition, and this is the case in my high school district. If the seventh and eighth grades are removed from these schools it will relieve the crowded condition and give longer periods for the work in the six lower grades. I have found by my questionnaire that out of 98 replies, there are 35 high school districts which are so situated that the principals of these districts would advise that the intermediate school be established in their districts. But in sparsely-settled districts the attendance is so small, the schools are so far apart and the roads, a good part of the year, so nearly impassable that such an institution is clearly out of the question at the present time, except in a few local centers. In this case only a part of the pupils would be benefited thereby.

The question of transportation is the serious drawback in most cases, since in each district where the intermediate school is possible, about half of the pupils will have to be transported. The cost for transportation ranges from \$2 per month per pupil in the Tamalpais High School District to \$20 in the Wasco District. The average is a little less than \$5 per month per pupil.

In large and sparsely-settled as well as in the more thickly-settled districts, many principals advise that not only one but two or more intermediate schools should be established in local centers of population and that these schools would act as feeders for the senior high school. No doubt, you are all aware that this plan has been adopted in three places in the state where branch high schools have been established—Siskiyou, Corning, and King City high school districts.

I have estimated that it will cost the Turlock High School District from \$25 to \$30 more per pupil per year to educate the seventh and

eighth grade pupils in the intermediate school than it does at the present time in the local districts. About \$20 of this additional expense must be paid out for transportation. When I asked the question, will the benefits derived from the intermediate school warrant the additional cost? this question was answered in the affirmative by all those principals who advised that such a school be established in their high school district. They stated further that the benefits derived from the intermediate school can not be estimated in money value.

If we will look in the *second* place at the possibilities of the intermediate school which meet the needs of the pupils and the requirements of the age we will find that the additional cost per capita looks small and insignificant compared with the benefits derived. The first thing which interests me is, that the division between the sixth and seventh grades is a natural one, since it comes at a time in the life of the child when the child is entering on that great awakening period. The child is entering upon a new career, the old system no longer meets its needs, therefore it is necessary to enrich the course of study with subjects which will give the individual a chance to find himself. These subjects are conceded to be vocational, supplemented with English, History, Civics, Hygiene, Languages, etc.

In order to present these vocational subjects properly it will be necessary to provide good equipment, and teachers who are college and university graduates with special training along these lines. It is at this impressionable period in the life of the child that the pupil needs the best teachers that our land affords. Better equipment and stronger teachers will be a stimulus to the child's future educational development.

Again the intermediate school meets the needs of pupils from the country districts. My questionnaire brought out the fact that there is an average of six pupils in the seventh, and three pupils in the eighth grades in the country school districts of the high school districts in which this plan seems advisable. In these country schools the classes are so small in these grades that there is no rivalry between pupils and there is no interest taken in the work. If these grades are consolidated into an intermediate school system the classes will be larger, the class spirit and the class rivalry will tend to spur the young people to greater activity. The associations will be more elevating and inspiring and will serve as an inspiration to do better work.

It is further claimed that this system meets the needs of the age in that it will take our young people into this most needed environment before the compulsory school age limit has been reached. Here the pupil is forced into an environment which is more ideal in a social and an educational way. This system will pave the way for the pupil's future educational needs in providing for him an opportunity to find

himself as well as to give him the chance to become acquainted with the educational methods and systems which are used in high schools, junior colleges, and universities, and open for him the way into the industrial world.

There is yet another way in which this system meets the requirement of the age, that is, it will give a uniform preparation for the local high school work (whatever that may be). In reply to my question, what can the intermediate school do for your high school district: I found that the most uniform reply was that it would give a uniform preparation for high school work. One principal said that it would cause trouble. Another expressed by sentiments in criticising our present system. He said, "There must be something 'rotten in Denmark' since we have so many schools in one high school district under as many heads as there are schools in the district." I only need to mention this to call to your mind that our county system is such that it does not meet the needs of the county school and the high school to its fullest extent. To illustrate my point let me cite some of the things which it is necessary for me to do in my district. I must give to the pupils of the first year in high school who come from the country, the seventh and eighth grade work in Domestic Science, Manual Training, Music, Drawing, etc., and refuse the first year pupils from the town grammar schools work in these lines until the second year, at which time, country and town pupils are ready to do the same class of work in these lines. Again let me illustrate from actual experience. The county and town system allow a pupil to graduate from the eighth grade even if he or she falls as low as 50 per cent or less in one subject provided the average is 75 per cent in all. This system allows the pupil to shirk the subject he does not like. For boys this subject is usually English and Grammar and for the girls it is often Arithmetic. The pupil does not realize that he is deficient until he begins his high school work, when he meets it face to face. This condition is sometimes pitiful.

This brings me to my *third point*, that is, the intermediate high school as a step toward better educational and administrative possibilities for the high school district, since it may act as an entering wedge to break down some of the old foggy notions concerning educational and administrative problems. At the present time our country schools have no supervision since the county superintendent, the only one authorized by law, has no time to do this work. The personnel of the local boards is continually changing. These boards are made up of good men and women with good intentions, but they lack experience, which is absolutely necessary in hiring teachers and in conducting a school system. Poor schools and poor teachers are too often the result.

In order to overcome this it is possible the principal of the high school should be made by law the supervising principal and the high

school board of trustees should be made the governing body for the transaction of all business for the local districts in the high school district, and that the boundary lines of the local school districts should be abolished and that the pupils should be allowed to attend the nearest district school without having to go through the necessary red tape of the present time along with the other inconveniences. This will give the principal the opportunity to bring each school to a uniform standard of scholarship which I find is sadly lacking in our and other high school districts.

Again I believe it is a stepping stone to better educational facilities for the small high school which is struggling for its existence at an enormous expense to the local communities. As I understood it the intermediate school would include the first year's work of the main high school proper and possibly the second year if the attendance warranted it. Here economy and efficiency would result. The great cost for the small high school is in educating the third and fourth year pupils. Here is an opportunity for the small high school to become an intermediate high school or become a branch high school of a neighboring high school, which is worthy to be called a high school, by joining the neighboring high school district. The community in which the small high school existed would be better served by the intermediate school at a minimum cost per capita and the upper class pupils would have access to better educational facilities by attending the main high school which would be better equipped than the smaller school, and this would be controlled and operated by both districts. This would be a benefit to all districts concerned, as it would increase the educational benefits and reduce the cost per capita to a minimum.

I see in the possibilities of the intermediate school a new sphere of education which it will open for some districts. The crowded high schools will be relieved of the ninth grade and an opportunity will thus be given to establish in these high schools the junior college.

Before these possibilities can be realized it is necessary to have some laws changed and others made, and this brings me to my *fourth* and last point, that is, the necessary legislation which is needed in order to carry these possibilities into effect.

In the first place it is necessary to increase the maximum rate for transportation of elementary pupils as it now stands from 15 cents to 25 cents. This will make the law for the transportation of intermediate pupils the same as the law for the transportation of high school pupils.

Second, the present law, limiting the organization of the intermediate school to districts having an enrollment of 100 pupils in the seventh and eighth grades, should be amended so as to remove the restriction.

Third, the cost for maintenance will be increased; therefore the present law for raising revenue must be changed in such a way as to raise enough money to carry on this institution.

The fourth needed legislation is the direct outcome of that which is needed to bring about a more uniform and a better preparation for entrance to the intermediate and high school proper. It is possible that a law should be passed making the high school principal the supervising principal and the board of trustees of the high school district the governing body for the transaction of all the business for all the district elementary schools in that high school district, since the principal of the high school and the high school board of trustees are granted this power for the intermediate high school, the senior high school and the junior college; or abolish our present system and establish the county system, with its expert county superintendent, with a corps of assistants who will act as supervising principals, and a county board of education which will be the governing body for the transaction of school business for the county; or establish a department of education in the state which will regulate more satisfactorily our school system. I believe that our present system should be revised and that it should be done immediately.

Then I believe that the boundary lines of all the local districts within that high school district should be abolished. If it is the county unit plan, then the boundaries in the county should be abolished; if it is the state plan, then all school district boundaries in the state should be abolished. Then the children would be allowed to attend the school which is most convenient, provided these pupils can be accommodated; therefore I believe a law to that effect should be made.

Gentlemen, I have attempted to point out to you the possibilities of the intermediate high school for union and county high school districts as I see them at the present time. In the first place I have tried to show you the possibilities of the intermediate school in thickly and sparsely-settled districts; second, the possibilities in the intermediate school which meet the needs of the pupils and the requirements of the age; third, that the intermediate school may serve as a stepping stone to better administrative and educational possibilities; fourth, and finally, that certain legislation is necessary to carry these possibilities into effect.

HIGH SCHOOL EXTENSION.

O. H. CLOSE, Principal, San Juan Union High School (Fair Oaks).

Our chief extension work, at the San Juan Union High School, may be classed under three divisions:

1, Agricultural instruction and club work; 2, the work of the parents' auxiliary; 3, credit for home work.

The first and most important at present is the agricultural extension work, with boys' clubs and experimental work with farmers.

Last year we organized our first agricultural club, consisting of eight boys, none of which were at that time especially interested in agriculture. They entered upon the work after considerable persuasion. The results were quite satisfactory, but the most satisfactory results were not in financial profits made by the boys. Some of the boys only made expenses. The gratifying results came from the increased interest in agriculture which the boys displayed and the educational training derived from the systematic regulations of the club work.

One boy who claimed he was not interested in farming, was induced to enter the contest. He is now an enthusiastic agricultural club member and no longer talks about becoming a lawyer.

Another boy was kept in school on account of the club work. His father had decided to keep the boy at home, but after the visit made by the club directors, and the principal, the father was convinced of the greater value of an education to his boy than the amount of money he might earn working on the farm with him. He not only sent him to school this year, but bought him a Ford for conveyance. One boy states that the most valuable lessons in how to succeed in life were learned by him while attempting to make his bean crop grow.

This year the board of trustees has employed an agricultural teacher for twelve months in the year. Ours is one of the ten schools in the state this year receiving government aid under the Smith-Lever act for agricultural education in secondary schools.

It is the duty of the agricultural teacher, aside from his regular school duties, to form agricultural clubs in the elementary schools and the high schools and spend as much time as possible among the farmers of the district.

A high school club with twenty members instead of eight has been recently organized. In the five grammar schools about forty boys are enrolled in the agricultural clubs, and a keen interest is manifested in the work. The elementary clubs are conducted along the same lines as the high school clubs. An organization which greatly facilitates the agricultural club work among the elementary schools is the high and grammar school teachers' association in the district, which holds meetings every six weeks.

It is too early to determine what the success of elementary school clubs will be, but we anticipate that these clubs will arouse an interest in the boys of these schools for agriculture, to such an extent that many of them will later enter the agriculture classes in the high school; and it has already bound the high school and the grammar school more closely together.

Community extension work requires much time and effort and can not be carried out effectively unless the support and cooperation of the community is secured. This assistance is being furnished in a most commendable manner by the high school parents' auxiliary in our district. The homes and the school need to be closely associated and this can only be secured by some form of parents' organization.

The Parents' Auxiliary of the San Juan Union High School has done some very credible work. Through its efforts hot lunches are being served this year, the school grounds improved, and a series of splendid educational lectures delivered before the association. The organization has done more to educate the parents regarding the educational needs of our community, in the short time it has been in existence, than could have been done in five years without the organization.

The third part of our extension activities is the giving of credit for home work. At the present time the credit given is chiefly for music taken under competent instructors teaching an organized course of study in music, but we hope to extend the giving of credit later to other subjects and activities. We also have four students this year who are compelled to work during the day, but send in their work daily in three subjects each and visit the school as frequently as possible to have personal interviews with the teachers. Students who are interested enough to secure an education in this manner, we find, do work equally as good on an average as do pupils in regular attendance.

A moving picture machine is to be installed next month, which we hope to use to advantage both in our regular school work and community activities.

HIGH SCHOOL EXTENSION.

H. N. Young, Principal of the King City Union High School.

Agricultural extension.

The types of agricultural extension work being done by the King City Union High School coincide very closely with those described by the three preceding speakers. In this connection, one other method of community agricultural extension pursued at King City might prove of interest, namely, the University of California Farmers' Institutes. The King City Union High School has, for the last four years, cooperated with the University of California Agricultural Extension Department in arranging institute sessions in various parts of the district. The high school agriculture department, having determined beforehand when the university speakers may be obtained, organizes committees at the different centers and plans the program and itinerary for the institute speakers. The high school agriculture instructor accompanies the party as a member. Each local committee makes its own arrangements to fit around the speaking program, these plans including such features as barbecues, dances, picnics, stock exhibits, poultry exhibits, products exhibits, literary programs, etc. Last October sessions of one day's duration were held at six widely-separated points, to the expressed satisfaction both of the communities and the University Agriculture Extension Department.

A typical large district.

The King City Union High School District consists of one city district school, one three-teacher district school, and many small one-teacher district schools. This high school district is, roughly speaking, in the shape of a trapezoid, with King City at the intersection of the diagonals, the longer diagonal being 105 air-line miles in length and the shorter 39 miles. Despite the fact that the area of this district is about 2,300 square miles, only 50 pupils are graduated each year from the 47 schools included in the district, and of these only 50 per cent (from nine districts) live within "striking distance" of the school at King City. Transportation for the out-of-town members of this 50 per cent was resorted to at the time the school was inaugurated, six years ago.

Need for "pupil extension."

For the past four years the principal of the King City Union High School has made it a point to get acquainted with every possible seventh and eighth grade pupil, and their parents, in the home environment, by annual visitation trips. This has meant 70-mile drives and 40-mile horseback rides, for several of the districts are in the "trail country" of the Monterey National Forest. This acquaintance with conditions

which are duplicated all over the state, has had a twofold effect. It has emphasized the need for "pupil extension" and has shown these people that the school for whose support a portion of their hard-earned taxes go, has real interest in the education of their children.

Branch high schools.

But this district is typical of many other high school districts in the state, and this suggested problem of "pupil extension" is a real one. Branch high schools are one possible solution for this need, but the small number of pupils that can be gathered together at any one point is frequently the deterrent factor.

Though three other high schools in the state are maintaining branches, the King City Union High School Branch differs from all the others in the fact that its branch is intimately connected with the school district in which it is operated. Possibly the name "cooperating branch" would best express this relation.

The cooperating branch.

By agreement between the high school trustees and the trustees of a union district (four districts), the following plan was entered into, with the active and interested approval of the county superintendent of schools. The branch is located 27 miles from King City and 18 miles from the nearest railroad point.

(a) The teacher of high school subjects is employed by the high school board, and holds a regular high school certificate.

b The salary of the teacher of high school subjects is paid jointly, as follows:

A certain amount (in this case one-tenth of 75 per cent of the annual high school cost per pupil), is allowed by the high school on the salary of the high school teacher for each pupil in average daily attendance on the high school class for a given school month, tenths being counted in figuring this product. The balance of this teacher's salary is paid by the district school.

(c) Science and manual training equipment and supplies and the expense of supervision are paid by the high school, the salary rate per pupil being made enough below the total cost per pupil in the main high school (25 per cent allowed in this case) to cover this expense.

d The high school teacher teaches four high school classes (English 1, Science 1, Arithmetic 1, and Manual Training 1), and the combined seventh and eighth grades, acts as principal, and operates and cares for one transportation bus, living at one end of the district for this latter purpose. A grade teacher handles six grades (about 30 pupils) in five classes (1, 2, 3, 4, 5), and operates the other bus. This class arrangement gives 40 minute recitation periods daily for the high school classes, with two weekly laboratory periods in science, and daily double periods in manual training. The eighth grade class receives instruction in 30-

minute periods, and the lower grades in 20-minute periods per subject. The eighth grade subjects are English, Arithmetic, History, Geography, and Manual Training, the lower grades following the county outline.

(e) The union district school furnishes transportation, classroom, furniture, janitor service, etc., for the high school class.

(f) The high school principal acts as supervising principal.

Advantages of cooperating branch.

The advantages of the plan are many. The cost per high school pupil to the high school is no more than at King City, regardless of the size of the class. The work of the seventh and eighth grades leads more smoothly onward to work of high school grade (an incline, rather than a step). More district school graduates are enabled to go further in their formal education (only one boy out of the seven boys and one girl enrolled in the high school class was even a possibility for King City, or elsewhere). The district school, instead of paying two full-time salaries, pays only three-fourths of this amount. Increased community interest in the school results from the addition of the high school class to its membership. The plan enables the employment of a more experienced grade teacher than small schools can usually afford. The school is run for ten months. And it must not be forgotten that this plan makes the operation of a branch financially possible in a community too small to justify the operation of a "noncooperating branch."

Using the first four months of the present school year as a basis, the high school salary has averaged \$90 per month, and the district school salary to the same teacher has been \$50, the latter amount being the net cost to the district of teaching, supervision, and bus operation by this teacher. The grade teacher receives \$85 for her teaching services and bus operation. At this time it appears that a second-year high school class will be possible for next year, in which case the details of the plan will be changed, with the cooperating features retained, however.

Dormitory need and possibility.

But what of those to whom attendance without change of residence even at a possible branch, is impossible? The answer is hard to find in some individual cases, but a school-operated dormitory is at least a possibility in many communities. The question of responsible supervision of conduct by the school authorities is the one objection to this plan, yet there are many communities and many schools where this plan might be safely utilized.

Three schools are at present operating dormitories in the state, each according to a different plan. The Gardena Agricultural High School (Los Angeles City Department) has a plan whereby a limited number

of students (four) may earn their board by doing the farm work of the school farm. The Antelope Valley Union High School at Lancaster has for two years operated a dormitory on the house-club plan, the cost to the patrons having been only \$9.40 per month apiece for the eight girls, three boys, and teacher-chaperon. The Trinity County High School at Weaverville is this year operating a dormitory on the boarding-house plan, the expenses of the matron being paid partly by public subscription and partly from the advertising fund of the county, the argument for the use of the latter fund running about as follows: "Good schools are the best advertisement—a dormitory will make the high school bigger and better—let's advertise!" Three boys and three girls are taking advantage of this plan.

The present laws do not directly or specifically authorize the establishment and operation of dormitories by high school boards, hence it would seem that some legislative action should be taken to clearly legalize this method of "pupil extension" in justice to those high schools which are already operating, or planning to operate, a dormitory.

Pupil extension—conclusions.

The speaker's observation and experience in "pupil extension" leads him to the following conclusions which he offers for your most thoughtful consideration.

(1) Every district school in the state should be part of some high school district, preferably that to which it can most readily send its graduates.

(2) Every high school principal of a union or county district should know thoroughly the whole district as to geographical, business, and social conditions, and should be able to work with the district trustees and teachers, in cooperation with the county superintendent of schools, to the betterment of educational interest and facilities in the various districts.

(3) It is the duty of the modern high school to get the pupil to the education or the education to the pupil.

(4) "Pupil extension" may be accomplished by such means as transportation of various types, one or two year cooperating branches, one or two year noncooperating branches, dormitory facilities, or correspondence courses, as any, or all, of these devices may apply to existing ideals or conditions.

HIGH SCHOOL EXTENSION.

C. E. VAN DEVENTER, Principal Anady Union High School, Sebastopol.

By high school extension I mean the serving of a community in whatever capacity the high school may be able. Extension is not alone instruction in high school subjects through correspondence, nor the serving of any particular group in any limited capacity. Extension means the putting to work of all the resources of the high school in such a manner that it will serve those people, young and old, who are not able to come and sit in classes within its four walls.

It is with this understanding of extension that I speak this afternoon.

Sebastopol is a small town of about 1,400 inhabitants near Santa Rosa in Sonoma County. The population is mainly dependent upon fruit—apples, grapes, and berries. When I went there a year and a half ago it soon became apparent to me that a special service the high school might render lay in bringing assistance to the people in their horticultural activities. Besides the special work there was the social assistance the high school might render, the kind of social assistance that any small community of scattered families needs badly.

With these two needs of the community in mind we went to work a year ago, to be of service as best we could. A man was employed to work out for the high school the kind of a course in horticulture that would best serve such students in the high school as intended to stay in the community and do horticultural work. This teacher devoted a half day, the forenoon, to such work in the high school. The afternoon this teacher used in whatever way he deemed best in being of service to the people of the community engaged in horticultural pursuits. Opportunities came in abundance, and rapidly. There were scale problems, questions about spraying, pruning, fertilizing, cover crops, cultivating, grafting and what not. Now, as you know, no man can know all these things, nor can any man go into a community and at once give expert advice. But it did develop that such a man could be of great assistance in getting the farmer and the expert authority together. Many of the farmers have availed themselves of the advice of the U. S. Department of Agriculture, the state university, and the county horticultural commissioner, but there are also many who do not know how or where assistance may be had. Such as these latter our teacher has been able to help most. He has been able to tell them how and where to get information about their special problems. Often he has been able to assist them greatly out of his own knowledge and experience. Shortly after we began our work we found that bringing expert authorities into the community greatly assisted the farmer. Thus far we have been able to get several men who have come and lectured and demonstrated at a central place, and upon occasions they have lectured and demonstrated

at several different places throughout our large union district. Thus far we have had Dr. Mead, Colonel Weinstock, Mr. Bryce, Mr. Brehmer, Miss French, and Professor Kern. In illustrated lectures we needed a lantern, so we bought one in which either electricity or gas could be used, since most of the country schoolhouses where some of these talks were given have no electric connections.

Besides these speakers our own instructors have given many valuable illustrated talks throughout the community on such topics as Sprays, Fertilizers, Pruning, Cultivation, Cover Crops, Injurious Insects, Milk and Dairy Sanitation, etc. These talks have been in the evening at the various district schoolhouses.

In addition to this work our instructor early found it advisable to get some sort of elementary plant work done in the grammar schools of the district. We knew that even so much as getting children interested in the growing of something at home was valuable. So we began to assist the grammar school teachers of the district in giving elementary instruction in plant growth and care. Uniformity in method was obtained by having the teachers meet at the high school once a month, where our instructor went over the lessons and the demonstrations to be given at their schools during the following month. Most of the teachers cooperate enthusiastically. It is our hope that we may soon have a district exhibit of home-grown products with prizes awarded for best results. The new normal school requirements in agriculture will make country school teachers more efficient in their school work, and take some of the burden off the shoulders of those who are attempting such work as we are doing.

So much for the extension work in horticulture.

Now for the extension work in a social way. Every small community needs some one to assist in bringing scattered families together for a good time. They are all hungry for sociability, but they often don't know how to get it. Our faculty has done much to assist the people of the community in getting up simple entertainments, usually in the district schoolhouse. Everybody comes, everybody wants to come, everybody has wanted to meet his neighbor socially for a long time, but often no one shows up to start things going. Everybody seems to enjoy the entertainments, the sandwiches, the cake and coffee, and the pleasantries of his neighbors afterwards. Sometimes the faculty members have appeared on the program, sometimes students in the high school, but we attempt in so far as possible to have the community entertain itself, and often to our surprise we find it splendidly capable. The teachers of the country schools are usually hard workers, able and willing to cooperate. The people of rural districts like to see colored slides, and usually we have been able to

grant requests for stereopticon exhibits including good slides, instructive, entertaining and enlightening.

In addition to these two ways of making our high school serviceable, I wish to mention one or two other matters. Since assisting in these two ways we have been called upon to assist in others. Teachers have asked us if we would not assist in a plan to get better and more uniform work done in music and drawing. Arrangements are now being made for such teacher to meet regularly with our music and drawing teachers to work out some such plan. Perhaps this is not direct extension, but it seems to me that any effort that helps the grammar schools will help the community. The new normal school requirements will bring about better conditions in the grammar schools in this respect also. Some ambitious teachers have asked for assistance in sewing, and one has started manual training in a shed, the equipment being bought with money raised by entertainments. Our sewing and manual training teachers have visited these schools and given what help they could.

Since our work began many inquiries have come in from parents about the work offered by the high school. Our faculty have been able by community talks to give the people a better understanding of the high school, what courses it has to offer, cost, etc. I believe that our greatly increased enrollment this year is due in great part to a better understanding of the high school on the part of the parent. Sometimes we send our most capable high school students to the grammar school from which they came to answer some of the questions children and parents ask. I would have you believe that there is no motive of advertising, but one of helpfulness; and results bear out our motive.

Twice a year we hold an athletic field day and exhibit of high school work. On these days a special effort is made to explain the work of the high school to the many parents and friends who come. We hope that our athletic field day will soon grow into a play festival in which the whole community may take part. On this day last year over 1,000 people were present to witness the contests among nine of the district schools. Both boys and girls take part, and besides the standard events we have potato races, sack races, and such old-time sports. No admission charge is made. This year we want to have a regular community picnic and festival.

HIGH SCHOOL EXTENSION.

M. H. ROWELL, Principal Sonoma Valley Union High School.

There are three important factors in high school extension work which vary within wide limits.

First: The community and its needs which call for attention from the school.

Second: The type of project which may be employed to meet the need.

Third: The schools and teachers who supervise and direct the project which is intended to meet the need of the community.

In order to carry on the extension work most effectively a specific need should be ascertained and then a well-ordered plan formulated to meet the need.

The extension work in Sonoma Valley has been concerned principally with agriculture and the problems of rural life. When the work was first undertaken, the faculty of the school was limited to four teachers, whose time and interests were well occupied with the work of a crowded curriculum that offered only the subjects of the college preparatory course and a limited amount of commercial work. Only eight per cent of the pupils who have ever entered the school ever went on to normal school or university. This school, like many other rural schools, was making no special effort to help the farmer make his farm more productive, the farmer's wife to do her work more efficiently and with less drudgery, nor make living in the country more attractive to the country boy or girl.

The specific problem of how to make the high school be of practical service to an agricultural community awaits solution. How can it help to bring agricultural practice up to date and act as a local force, working to stimulate an interest in scientific and intensive agriculture?

The great success of the boys' and girls' agricultural and canning clubs in the Eastern and Southern states caused me to look to that source for aid in solving the local problem. Consequently, the first step was to organize a boys' agricultural club, and as the University of California had not yet taken up the supervision of that activity, we operated directly under the Department of Agriculture at Washington, D. C. Subsequently, the University of California took up the work and we came under its direction. Crop growing contests have been held each summer, and for three seasons the winners have been sent on the Prize Winners' Transcontinental Tour to Washington, D. C. A growing interest has been aroused in this activity, and many ranchers of Sonoma Valley, like thousands of others elsewhere, have been converted to scientific principles of agriculture because mere boys have hung up new and enviable records in crop production.

A girls' canning club was formed, which met regularly in the summer, and this resulted directly in the addition to the school of a domestic science department, a special teacher, and a new building. A course is now given for the housewives of the community who come to the school twice a week to learn how to reduce the high cost of living.

Perhaps the most interesting single activity which has been carried on, and the one which is developing the most community interest, is the Annual Sonoma Valley School Children's Agricultural Fair. This work has been held for three successive falls, each time being larger and better as regards the quantity and quality of exhibits displayed. In order to acquaint you with this feature of our work, I will briefly outline our method of procedure.

In December, 1913, a student body meeting was called for the purpose of organizing a School Children's Agricultural Fair Association. Regular officers were elected by ballot, and in addition, students were appointed to act as managers of the eight different departments, which included Fruit, Vegetables, Cooking and Canning, Sewing, Cut Flowers, Poultry, Pets and Livestock. The plans were well formulated and explained as concretely as possible. Each officer was thoroughly acquainted with his duty. During the spring the ten district schools of the High School Union district were visited, and the teachers and pupils acquainted with the plan for holding a school children's agricultural fair at the Union High School in the fall. Prizes ranging from 50 cents to \$3 were offered for the best of each kind of article exhibited, and special prizes of \$5 and \$3 were offered to the school-room whose pupils aggregated the highest number of points awarded on exhibits.

Without exception the district schools all welcomed the idea and began to plan for their exhibits, promising to bring vegetables, fruit, goats, dogs, rabbits, cooking, sewing, etc. During the summer the homes were visited and the parents interested in the plan. It was a source of satisfaction to find many parents enthusiastic over the idea, and doing their utmost to stimulate an interest among their neighbors.

On Friday and Saturday of the second week of the fall term the fair was held on the high school grounds. Exhibits began to arrive during the week, and by Friday evening nearly 1,000 entries had been placed in their respective departments.

Concession space was sold to the local merchants for displays of farm machinery, gas engines, automobiles, and merchandise.

The literary program consisted of four lectures by the state lecturer of the Grange, Mrs. Kate D. Hill, and three by the professors from the College of Agriculture: "How the State Agricultural College Can Help

the Farmer at Home," by Professor Oglesby; "Stock Judging," Professor Bryant; "Modern Movements in Rural Education and Community Life," Professor O. J. Kern. All the lectures were well attended and much appreciated.

Saturday was marked by the larger attendance of the two days, many families driving in from the remote parts of the district to spend the day. They brought their family lunch with them, and supplemented it with free hot coffee served by the school.

In addition to the lecture on Saturday morning the stock was judged before the improvised grandstand, and those present heard with great interest the judge discuss the poor and good qualities of the various animals while judging them.

In the afternoon a track meet was held between the pupils of the ten district schools, which not only served as a means of amusement for the time being, but helped to make them acquainted with the high school.

The following two years the same plan has been carried out except that this year practically everything was managed by the Boys' Agricultural Club. The attendance has been large and farmers have expressed great satisfaction in the event. In 1915 five large packing boxes of fruit and vegetables were sent to the California Building in the Panama-Pacific International Exposition. The most notable growth has been in the livestock department. The first year only a few horses, cows, and goats were entered, but this year many thousands of dollars worth of stock was exhibited, some animals having been prize winners at the State Fair. I know that more pure blood stock will be entered next year, as I heard one farmer say that he knew he could bring better horses to the fair than his rival brought this year. It has become a community event, and has not only aroused much interest in the school, but has developed a keen sense of interest in better farming, stock husbandry, and crop production.

The work has all been carried on "off the program," and has resulted in the addition of a special teacher of agriculture, and another new building unit to match the recently built Domestic Science Building.

The trustees have just signed a contract with the university whereby we participate in the Smith-Lever funds, the university furnishing \$200, and the local school district \$200 for the extension work and organization of boys' agricultural clubs among the children of the elementary schools tributary to the high school. In addition to holding the annual crop growing contest, and School Children's Fair, the Boys' Agricultural Club has received and tested many samples of milk and cream at the high school, distributed bulletins on agriculture, and sent samples of soil, water, and pests to the university laboratories.

I consider the boys' and girls' agricultural club movement one of the most important forces working towards the development of the agricultural resources of this nation today. In conclusion I beg to cite some specific instances of results accomplished.

For nearly three-quarters of a century the federal government has been spending millions of dollars trying to increase the productive power of its farms by means of bulletins, farmers' institutes, and demonstration trains. During thirty years previous to the organization of the boys' and girls' agricultural club movement the average annual increase per acre was less than one-half of one per cent. But when, in 1911, Jerry Moore, the twelve-year-old boy of South Carolina, a club member, raised over 228 bushels of corn on an acre, and became champion corn grower of the world, a new system was getting results.*

Within two years after the exploit of Jerry Moore, the annual corn crop of South Carolina jumped from 17,000,000 bushels to 50,000,000 bushels per year.

In 1914, 1,200 members of boys' corn clubs in Ohio raised the average yield per acre of corn from 36 bushels to 81 bushels, thereby increasing the productive wealth of Ohio \$20,000,000. In appreciation therefor the business men of the state sent the entire 1,200 boys on a free trip to Washington, D. C. As a direct result of the boys' pig clubs in Georgia, the sum of \$400,000 per year has been kept in the homes of the rural people who formerly paid that amount for ham and bacon shipped into the state.

The beef industry of the United States which, during the past three decades has experienced an enormous decline, has been saved by the boys' baby beef clubs of Texas and the Middle West.

There are many other similar facts which can be cited as evidence of the tremendous results accomplished through the cooperation of the federal department of agriculture, the state agricultural college, and the public school. It is a combination, nation wide in its scope, that is bringing a "new freedom" to our rural people, a prosperity to our country, and you can't beat it.

*Reports. Federal Dept. of Agriculture, Wash., D. C., American Magazine, October, 1914.

HIGH SCHOOL EXTENSION (Correspondence Course).

JAMES KEITH, Principal Calaveras Union High School (San Andreas).

Preliminary.

1. Reasons for the adoption of such a course.
2. Subjects offered in the course.
3. Working plan.
4. Results.
5. Cost.

PRELIMINARY.

The Calaveras Union High School District, formerly a county high school until the law was changed, consists of the larger portion of Calaveras County, stretching from the eastern edge of the San Joaquin Valley back into the deep recesses of the Sierra Nevada Mountains. It is sparsely populated and the principal occupations of its inhabitants are that of mining, lumbering, cattle raising and small farming. While there is never the poverty that is experienced in populous centers, yet the inhabitants are not rolling in wealth and with many, though they do not lack for the main necessities of life, actual money is a scarce commodity. They are a liberal-minded, generous-hearted, home-loving people, who desire to have their children receive as many of the educational advantages as do those children who are more advantageously situated. The high school is located at the county seat in the town of San Andreas. It has a faculty of four teachers, which is about as large a faculty as the average attendance will warrant, and the expense of running the school is about as large as the district can, within reason, legitimately afford.

The school has been in existence since the year 1905, and has sent out a goodly number of staunch American citizens, reasonably well equipped for the battle of life.

Reasons for the adoption of a correspondence course.

Shortly after the University of California inaugurated its correspondence courses in connection with its plan of university extension, it was found that a number of the applicants for these courses desired to take work that was purely of a high school character, while others had not the proper foundation for a successful grasp and pursuit of the subject selected. To overcome this difficulty, the extension division of the University of California appealed to the high schools of the state and asked their cooperation in this new field of their labor and, where needful and possible, asked them to inaugurate correspondence courses in high school subjects for the benefit of those residing in the high school district.

In answer to this personal request of the University of California, Calaveras High School offered to reciprocate as far as it would be

possible for it to do so along that line, and the matter was immediately laid before our board of trustees, at that time the county board of education. The county superintendent of schools in his tour of inspection throughout the county made careful inquiry as to the need and demand for such a course. He found that there were many boys and girls and a goodly number of grown people that would be only too glad to grasp the opportunity of extending their knowledge beyond the elementary school work by means of a correspondence course if same were offered. In the majority of these cases, on account of their distance from the high school, the condition of the mountain roads, and the storms of winter, it would be impossible for them to make a daily trip to and from the high school and their home, while for financial and other reasons it was impracticable for them to live away from home. The people in these localities also felt that since they were being taxed to help support the high school their children should in a measure be enabled to reap some benefit from the same and keep in touch with the rapid progress of the outside world. On the strength of the county superintendent's report, the board of education authorized the principal to proceed and put into effect such a course. Public announcement of the time of beginning and the subjects to be included in said course were given as follows:

The course is open to all individuals residing within the high school district regardless of age or previous educational qualifications, except boys and girls attending grammar school.

Subjects offered in the course.

Any subject, with certain limitations, taught in the high school is given by correspondence. High school credit is given for satisfactory work.

Working plan.

Application for the course is made on blank forms requiring certain information necessary for the guidance of the faculty. Each subject is divided into a series of natural-grouped lessons which are sent to the student, one at a time. Lesson one contains the name of the textbook to be used, the price, publisher and place where same may be procured (the textbooks used in high school, if suitable for the purpose, are generally prescribed), a few hints on how to study, a general introduction to the subject, and direction for the forwarding of work to school. In each succeeding lesson, a limited portion of the text is assigned for study, a brief explanation of that part of the text is made, and certain stated portions of work are required to be sent by mail to the school for correction and criticism. This corrected work is returned to the students, accompanied by the next lesson, with any suggestions deemed necessary. At appropriate divisions of a subject,

a test, covering that portion of the subject previously studied, is sent to the student with directions to answer the questions without referring to the textbook and without assistance of any kind. When a subject is completed and amplified or reviewed, a final test is given in the subject. This last test, however, is required to be had either in the high school or in the presence of a member of the faculty. Where a subject requires references outside of the textbook, the same is sent to the student, either in the shape of a loan of books from the high school library or, if inconvenient to send the books, by copious extracts from the same. In the case of laboratory work, where the experiment is such that it may be readily performed at home, the materials for the experiment and specific directions for the performance of same are sent to the student by mail.

Each teacher in the school assumes all responsibility for the correspondence work in the particular subject which she or he handles regularly in the classroom. This is done outside of the regular class work. All lessons, suggestions and letters to correspondence students are either drafted or dictated by the teacher to a student taking stenographic work in the commercial department of the high school, who then types the same in as many copies as may be deemed desirable. In this way the resident commercial students get actual practice work, while the teachers are relieved from the burden of clerical work in connection with the course. A complete record of each individual's progress in correspondence work is kept on file.

Results.

Because of the correspondence work in the high school the people of the district have taken a much more decided interest in the school; those living in remote sections of the district now feel that they are a part of the school district, that they are not being unduly burdened by helping to support an institution from which they can reap no practical benefit and that their children may have the nearest approach to a high school education that is possible under the circumstances.

This work has aroused the dormant ambition of many boys and girls and kindled in them a desire for progress, and an earnest effort to keep in touch with the outside world. A number of them have made special efforts and are now personally attending high school, with the result that the actual personal attendance at high school has been increased by about 25 per cent. The parents of seven of these with the assistance of the trustees invested in a Ford and are now making daily trips to and from school over an abominably rough road.

The average annual number of students taking the correspondence course is 18, the highest 30, the lowest 11, and the present number 20. A few students do not keep up their work and drop out from the course,

but the majority stay with it and make very creditable records. The enrollment of these correspondence students form no part of the regular enrollment of the high school nor does their enrollment bring any additional revenue to the funds of the district.

Cost.

The only cost to the students taking the course is the price of text-books, paper, and postage one way. The high school pays the postage on all work sent to students; this amounts to about an average of \$25 a year; this with an additional charge for paper and stationery is the only expense to the school. The teachers receive no additional compensation for this work apart from their regular high school salaries. The pleasure in the work and the good accomplished have been ample compensation for the extra labor entailed on the teachers.

A curious sequel to the request of one division of the University of California to start such a course, another division, that of the accrediting part, now informs us that for the number of teachers employed we are doing too much work, "that we are spreading it on too thin."

It seems to me that the university authorities should in some way correlate their knowledge of work done or requested at the instance of one department so that the same may not be unjustly criticized by that of another.

A PLAN OF CO-OPERATION BETWEEN THE FREE COUNTY LIBRARY AND THE HIGH SCHOOL.

CARL L. ANDERSON, Principal Corcoran High School.

How it works.

A little over a year ago I came into a new high school with all its attendant problems. We had a fine new building, a good student body and an optimistic community. However, we found a good many of the working tools of our institution sadly missing. This was especially true of our library, a feature that is coming to occupy a very important part in our work today. We had less than 400 volumes, well chosen under the circumstances, but of uncertain age and value. There were some recent editions, but some appeared to have antedated the flood by some years. It became very evident that something had to be done quickly. A very good appropriation had been made for library service, but hardly adequate. The problem was to get the greatest possible service for our money.

We soon discovered that we had no one on the faculty versed in library science, and permit me to remind you that there is a difference between the library of today and that of our school days. Then, one small bookcase full of doubtful volumes served. Now, the average California high school has a better collection of books than most Middle Western colleges had in our day. In the meantime, very few have advanced sufficiently in library knowledge to be competent to select a library in a few weeks time. This work is now a specialized science and we need to recognize the fact.

We turned to the county library under the law of two years ago, which permitted a co-operative scheme between it and the high school. This plan has been so successful with us that we have become rather enthusiastic about it.

The plan is as follows: A reference library is to be created first, valued at \$1,000. The collection of this library may be made in one, two or three years, to suit the local needs. We are doing it in two years. In a few months we will have paid in \$1,000. The library is already on our shelves. In case the school already owns a reference library, this initial outlay is not necessary. Two courses are then open to the school. This collection may be turned over to the county library, which then becomes responsible for its upkeep, cataloging, etc., or it may be retained by the school and kept up as before. The main reason for this list of reference books and serials is to have some standard of reference equipment for all high schools. It is sure to be more feasible

to have this equipment the property of the county free library rather than the high school districts, for the following reasons:

- (1) If a new edition of a particular reference work is published, this can be bought and placed on the high school shelves and the old edition shifted to some other branch where it will be useful.
- (2) High school districts which join the free library feel that their share in the ownership of the larger collection is far more valuable than sole ownership in a smaller collection.

After this collection has been fully provided for, the plan calls for what may be named *the permanent supplementary service*. This service is to cost the school \$75 for the first twenty-five pupils and teachers, and \$2 per person thereafter, per year. This is to cover the following points:

- (1) It is to supply departmental material needed from time to time for short periods such as literary selections for classes in English, supplementary readings in History, the looking up and forwarding of debating material, etc.
- (2) It is to cover the cost of magazines and periodicals, of general and departmental value.
- (3) It is to cover the cost of replacing out-of-date material in the reference collection, and the supplying of new reference books that may be desired by a change of instructors. It often happens that a new instructor wants an entirely new line of reference material. Under this plan, the old books may be taken up and replaced by new ones acceptable to the new teacher.
- (4) It is to cover the cost of uniform processing, cataloging, shipping, and repairing of reference collection and other books frequently used by the school.
- (5) Binding serials and periodicals that are to remain on the high school shelves.
- (6) It is to cover the cost of buying special books that can not be borrowed from the county and state collections.
- (7) It is to cover all transportation charges.
- (8) It will also provide for visits from the county and state librarians and place their technical training at the disposal of the school. Also the making and upkeep of a card catalog which proves to be of unusual value.

Such is the plan which is admitted by all concerned to be but a tentative one, and yet a workable one. We have tried it for little less than a year, and this is how it was worked.

We have found it very economical. As was stated above, we have not as yet paid in all of our \$1,000 for our reference collection, yet we have

actually on our shelves books valued at \$1,150, and have been given supplementary service from the very beginning. We have used, in all, including books borrowed from the county and state, to a value of over \$1,600, and could have had much more had we needed it. We have no dead material on our shelves. When we find that a book is not needed, we return such a volume and it is placed somewhere where it can be used. In return, we usually ask for some other book which we do need. This is the true exchange idea and means that in the long run the man who pays the bills will get from three to five times as much for his money as under the old plan.

I must return for a statement or two concerning the professional service given the county librarian. It has meant a larger and better selection for us. Several times we have asked for certain sets which, to the best of our knowledge, were the last word on a given subject. When the shipment arrived, a note would be found enclosed to the effect that the work in question had been superseded by a better one and that a substitution had been made. In every case it was found that the substitution was an improvement. We feel that this plan comes nearer to placing the small school on equality with the city school in the matter of library equipment than any previous plan. Our service has been prompt and we have never asked for a thing yet that has not been received as requested, or a better substitution.

We have had some objections raised to the plan which can be met as follows: It has been objected that the plan called for a surrender of the old high school selection which had been built up over a period of years. This is not at all the case. The old collection may be made to take the place of the \$1,000 reference collection, and its upkeep be taken as before, or the old library may be kept and a new \$1,000 may be chosen to supplement it. We believe, however, that the better way is to pool everything with the county, have it made uniform, cataloged, and kept as a unit. If surrendered, it is merely a surrender of the sense of ownership in a rapidly-aging collection, for the use of a much finer and more enduring one. Under this plan, whatever the state of California owns in the library line belongs to our little school.

It has been urged that by turning over the library fund of the district to the county librarian, a state of double taxation is created. It must be remembered in this connection that the direct library tax creates a collection of books for popular use. Every citizen of the state who lives in a county where a free library is located is entitled to the use of this. But the high school service is a special service, almost a technical one. In our case we have asked for and received volumes that have not been needed previously in either the county or the state library.

It has been urged that \$2 per pupil is too much for the service. We do not feel that way. The advice of the librarian alone has been worth \$2 apiece to us. One history class of a dozen pupils were referred to books valued over \$60 in one day, recently.

Finally, let us remember that any such plan must be one of true cooperation. County and state librarians are human. The field is new. They are ready to give us something which they have and which we need. I am glad that most of them are of the "better sex." No set of men could possibly get so much out of a dollar as they do, nor serve in as true a way. But we should return whatever help, encouragement and suggestion that we may be able. We have found that their tentative list for the reference collection was very long on History and rather short on English and Science. We have told them so, and I am confident that this has been heard in the state offices at Sacramento long before this. If we are correct in this, the next list will be modified to supply a greater variety in English, Biology, Chemistry, Physics, and the applied sciences and arts. There must be a true get-together spirit. If you join the county library to get \$2 worth out of one, it won't last long. But if you join to get 100 cents worth of service for every dollar spent, you will not be much mistaken. I am fully convinced that this plan will solve the library problem for the small high school.

A PLAN OF CO-OPERATION BETWEEN THE FREE COUNTY LIBRARY AND THE HIGH SCHOOL.

Mrs. H. J. SHUTE, Principal Esparto Union High School.

The County Free Library comes to the principals of the rural high schools with holiday greetings: a plan of co-operation between the county library and the high school aims at "complete and equal service" and has been approved by Mr. Will C. Wood and by Mr. Scott Thomas. Shall we rural high school principals reject or accept this plan?

The proposal of the county library is twofold, for it concerns (a) supplementary reading for the rural high schools, and (b) the reference library of these schools.

The school that I represent gives an excellent concrete illustration of how this offer of supplementary service will work out. We are 15 miles from our county seat, distant by the cost of \$1.50 for auto hire, and the expense of a day of time. Our local branch of the county library refused flatly to handle the library service of the school because it took too much time: so the school became an independent branch library. The refusal was right, since the taxes paid for the support of the county library are for general, not for special service. The elementary schools pay for the library service that they receive. Should not the high schools do likewise?

The charges suggested by the library are \$75 for the first 25 pupils and teachers, and \$2 each for each teacher and pupil exceeding that number.

During the school year 1915-1916 we received from the county library 191 books, 10 large De Medici pictures, \$78.50 worth of reference books and material, and 15 periodicals. Our board paid the library \$122, so that we paid \$43.50 for the use of these 191 books and 10 pictures. We secured, also, much help and information and the cards, envelopes, blanks, date stamps, etc., needed to run the library.

This year—not yet half completed—we have received reference books to the value of \$80, 198 volumes, and subscriptions to 16 periodicals, all for \$125 paid the library. We have also, at present, 257 library volumes on our shelves. Under this new plan we would be paying \$129.

Now, for the reference library. The offer of the county library is that a standard high school library of the value of \$1,000 be placed in each rural high school. The library can be bought in installments. The proposed plan, purely suggestive, and inviting discussion that will result in some offer from the principals, is that in three years the purchase be completed.

Just the mere suggestion, coming with the approval of Messrs. Will C. Wood and W. S. Thomas, of a standard reference library for each

school, will bring home to the boards of trustees the importance of the library, and you know only too well that as a rule these boards do not realize the importance of books as tools. They fail to understand that without an adequate supply of books they force the principal, who will keep schools up to a high standard, to attempt, with the tools of a house carpenter the fine work of a cabinet maker.

The school that I represent offers at least half a dozen reasons for accepting this offer of the county library.

1. By means of it we can secure an increase of interest on the part of pupils; for example, after a selection has been studied so that the pupils learn some of the means of making a prose article attractive, the library immediately puts into the pupils' hands, books of a kind similar to the article just read. The pupils receive with interest, many with eagerness, these books for supplementary reading.

Interest is further aroused by the mere fact the books have come fresh from the library. Often a book that the pupils are simply tired of seeing on the shelves, on the principle that "the same old girl, in the same old dress, in the same old place" loses its attractiveness, if in a newly opened bundle, will be readily taken for reading.

2. This plan makes for the securing of the better class of teachers, who consider being cut off from library privileges to be a distinct loss. High school teachers will soon follow the example of elementary school teachers who, before accepting a position, inquire into the matter of the school's library service.

3. By this plan we can draw upon the reservoir of the State Library and of other county libraries than our own.

4. We can keep our shelves free from out-of-date volumes.

5. We can provide promptly for the changing need of the school that comes from changes in the faculty, or in the subjects taught.

6. Through county library service we can secure the best authorities at the least cost.

RELATION OF THE UNIVERSITY TO THE JUNIOR COLLEGE AND THE WORK OF THE JUNIOR COLLEGE TEACHER.

PROF. B. M. WOODS, University Examiner of Junior Colleges, Berkeley, Cal.

The remarks of Mr. Liddeke concerning the well-assumed modesty of the average American who should know something definite about a given subject, and probably does not, will certainly have to characterize my discussion of the various problems that are inherent in the relation of the university to the junior colleges of the state. It is probably desirable in introducing the subject to define in a measure the duties assumed by the university examiner and to note the manner in which they apply to the problems mentioned. At the present time his duties appear to consist: first, in the supervision of the rating of the credentials of students entering the university from all institutions other than accredited California high schools and also with the unrecommended graduates of these latter; and, secondly, with the fundamental problems involved in these ratings as they may affect the relation of the university to the institutions from which the students come. As to the first matter it is interesting to note that during the twelve months ending October 1, 1916, thirteen hundred ratings of students who expressed a wish to enter the university were made by the committee on credentials and its officers. These did not include the applications received from fully recommended graduates of California high schools. Of these thirteen hundred slightly more than half eventually registered as students, although a much larger percentage might have done so had they desired. Among these applications were about one hundred from students in the junior colleges in California. Of these seventy-five or eighty came to the university, although all might have done so had not some changed their plans.

The rating of students from the junior colleges has been carried out in a liberal manner. The desire of the committee on credentials has been to articulate as intimately as possible the work of the junior college with that of the university. In fact the college credit given to students coming from the junior colleges has been allowed more liberally than that given to students coming from any but institutions of the highest rank. An explanation of this attitude on the part of the university in view of the present discussions concerning the scope and nature of secondary education seems to me to be highly desirable.

Less than one hundred years ago it was possible for Gauss as a scientist to be a contributor to the progress of at least three or four of the main branches of scientific learning as well as to be a well-informed man in several other branches. In particular, his work in several fields of mathematics, in physics, especially in the theory of elec-

tricity, in mechanics and in allied fields was of monumental extent and his knowledge of each of these several subjects was probably as complete as that of any man of his time. Within the last century, however, progress in science has been so great that it is not likely that the world will see another man as nearly acquainted with all scientific learning as was Gauss. This stupendous change in the extent of exact human knowledge has perhaps been the greatest factor in the development of the modern specialist in a given field.

As the college has existed in America up to the present time in alliance with the university the work done has had a twofold character. The courses of the first two years have been designed to complete in a measure for each student a reasonably comprehensive grasp of general progress. In other words, to supply him in certain fundamental subjects with what the well-educated citizen should know of the world and of its development. The work of the last two years has been definitely directed to a larger and larger extent to the mastery of the technic and the subject matter of some special field of study. This difference of work is possibly best described by the term "collegiate" for the first two years and "university" for the succeeding two years. The university work has naturally included the professional work in law, medicine, engineering, as well as the field of letters and science. There has been a growing conviction that here as well as in Europe the collegiate work should be confined to the secondary schools, to be done under more careful supervision of the students than is possible in large institutions, and to leave the university proper free to develop more completely the work that is proper to the professional schools. In addition, the demand of community that the boys and girls of the locality should be able to take more than the work of the high school before leaving home has aided in the establishment of the junior college, as it has been called, to give the collegiate work of the university and such other work as may be found desirable from the point of view of community needs. Naturally most of these junior colleges have begun by offering in the main courses that parallel the work of the lower division of our state university and at the present time they are attracting for the most part students who wish later to undertake university work. This is the natural and logical mode of development. Doubtless, community needs will offer a large field of study for some time to come and the junior college will find many problems presented that will not be immediately solved.

It seems improbable that a two-year unit in an educational system can be developed as an effective part of the whole if it is not in a large measure an integral part either of the work that precedes it or of that which follows. Consequently it seems probable to the speaker that two

years of junior college work will be merged into the secondary schools as a part of the future high school. In the past few days we have heard much talk of the proper division of our primary and secondary education into years described by numbers that sound more like football signals than educational terms. Speaking in this symbolic language, the writer is inclined to think that a five-four-four scheme is not an impractical grouping of the work that should lead a student who wishes to enter the university to the completion of his sophomore work. This would give us a four-year intermediate school preceding a four-year high school which could include the work now given in the last two years of the present high school and that now given in the junior college. The division is, however, a more or less arbitrary matter. The point really at issue is the necessity of continuity and development in the subjects studied. The present problem faced by the university is that of adjusting a dual situation. In the first place it seems unfair to allow full credit for junior college work done by a student who entered the junior college without 45 recommended units from the high school and the high school diploma, inasmuch as he would not have been admitted to the university without examination. Also it seems unwise to have high school students in junior college classes because of the probable effect on the character of the work given in them. These are both problems that are inherent in the transition which seems probable from the present four-year high school to a new secondary school system which is to include the junior college.

Undoubtedly in the development that we are facing the most important factor is the teacher who is to give the work added to the secondary program. It seems wise, therefore, to review the recommendation made by the university in its bulletin entitled "The Junior College in California," issued in 1915, that the junior college teacher should be especially qualified to teach a given subject. This capacity may be distinguished in some measure by the possession of the master's degree in addition to the high school teacher's certificate. The first usually stands for a year's graduate work in the careful study of some subject and in an investigation which acquaints the future teacher with the methods of scientific study of a prescribed problem. The latter has more reference to the adaptability of the candidate to the teacher's profession. The absence of either of these qualifications: a thorough-going acquaintance with the subject to be taught, and of a properly developed capacity for teaching should be a bar to this kind of work. The essential thing is that teachers should be qualified to teach and should have the opportunity of teaching. The question of qualification is perhaps more easily understood than the latter one of opportunity, especially by those concerned more with the financial management of

a school than with an adequate estimate of its educational output. Collegiate work, especially when given in courses that are new to a teacher, is a vast consumer of time. When a teacher undertakes a collegiate course for the first time it is reasonable to suppose that the proper development of this work to make it fit the needs of the students in the class and to be of vital interest will require at least ten hours per week outside of the classroom. When a considerable amount of time, as is here indicated, is so devoted to a course many problems, such as lack of interest on the part of the student and of appearance of fag, especially about the twelfth or thirteenth week of the term, disappear largely of their own accord, and the course as given comes to have a real reason for existence. It becomes not merely the study of facts relating to a subject but of a subject as related to life and to facts. In view of this the university is inclined to consider work in the collegiate field done by a teacher who devotes more than twenty periods per week to teaching as of decidedly questionable value. In fact, it is quite reasonable to suppose that when a teacher must read his own papers as they come from the members of the class and must develop a new course that two junior college classes and one high school class or vice versa will constitute a full program. Two high school classes and two junior college classes certainly seem to represent the maximum that can be rationally expected of a real teacher. The opportunity for live teaching consists not in a large number of classes to be taught but in a reasonable proportion of time for study and reflection concerning those that are to be handled. When junior college teachers are treated liberally in this respect the school may expect large returns from their work and the day will rapidly come when an inspection of the work done by such teachers by members of our lower division faculty of the university will be inappropriate because of the equality of the person whose work is examined with the examiner. The attainment of this condition is as Stevenson says: "A task for all that a man has of fortitude and of delicacy."

Discussion was led by Mr. David Burcham of Long Beach, who inquired of Professor Woods concerning the truth of reports he had heard in regard to the penalizing of junior college students entering on junior college work without having full college entrance requirements. Professor Woods assured Mr. Burcham that all students entering on university work were conditioned on the subjects required which they at that time could not offer. This would apply equally to students entering the university from junior colleges as well as from other schools of collegiate rank.

Mr. Moore of Los Angeles questioned Professor Woods concerning "back-door entrance" to the University of California through smaller

colleges other than the junior college. Professor Woods said that the university enforced its requirements as he had explained to Mr. Burcham, but that far from discrimination against the junior college, the odds were in its favor.

Mr. Hollingshead of Santa Barbara asked for information in regard to the grading of junior college teachers. He reported the case of one junior college teacher, an excellent instructor, who because of a poor showing on the day of the visit of the university examiner was given a low rating. Professor Woods answered that he was sorry to learn of the incident, would make note of the circumstance, and further explained that the judgment of the examiner was not always infallible, and that the instructions from the university to the examiner was that he must acquaint himself with the standing of the teacher, his preparation, work, scholarship, training, experience, and so forth, before forming the judgment.

THE UNIFICATION OF SECONDARY EDUCATION IN THE GREATER HIGH SCHOOL.

FREDERICK LIDDEKE, Principal Fresno High School.

The man who comprehends many relations is an outstanding genius. We ordinary mortals see only a few relations none too clearly, and so are apt to talk about half-truths and to overstate what half-truths we know, or think we know. With due regard for these limitations I shall undertake to point out serious shortcomings in our present-day education, and I believe you will agree largely. Also, I shall make bold to point out how these shortcomings may be greatly eliminated, and perhaps you won't agree. The argument, however, will not stand on theories untested, but on the findings of experience. Hence I can't qualify as a reformer. The appeal will be largely to European precedent, for we have very much to learn out of the lesson-book of Europe. And fittingly, for we are a mixture of European bloods. Our civilization in all its essentials and appurtenances, is European. The only American civilization we know anything about is lost among the ruins of Old Mexico and Peru, and so we can't afford to be insular.

American education, broadly taken, is a three-group system, elementary, university and secondary, the last ill-defined coming between the other two. European education, likewise, is a three-group system, designated the same, but yet not the same, particularly the secondary. In America education has aimed mostly at democracy of opportunity, somewhat regardless of ability. In Europe education was mostly aristocratic, but in time also favored democracy. What corresponds to our elementary schooling did not at first cut so much of a figure. Secondary education commenced down in the tender years. The studies were long-drawn-out. In time they were enriched, coordinated and correlated on sound principles. Not so in America. The main point to bring out is that the old preparatory academy with its very brief courses and short-heat studies became the present-day high school, its courses still too brief, and its studies still short-heat, greatly multiplied, to a great extent elective, and necessarily unrelated. Hence, our secondary schools and secondary schools in Europe have a different story to tell, and the difference is mighty.

In Europe all the elements of information and training have time to sink in, by long contact to take root in the mind, and so to take hold on life, just like our "three R's." The scope is general, and the fundamentals are solid and sound. In Europe a man gets educated. At least he knows, and he is supposed to know. If he has brains, he succeeds all the more, because he knows. The American, even of much schooling, is much likely less likely to be educated. Education has not had time to take, except in spots. So our schooled man makes a virtue

of modesty, and for pretty good reasons. If he has brains, he makes good in spite of what he doesn't know, and is at a great disadvantage. He has got to be more largely self-made. But why this difference?

In Europe secondary education is centralized in one institution. Its curriculum is usually eight or nine years long. The studies are distributed over long periods in order to be progressively adaptive to the growing abilities. They progressively interlock for the sake of unification with one another. These conditions were necessarily lacking in our old-time academies, and they are lacking in the American high school of today. Moreover, they are lacking in all secondary instruction, for secondary education is not all comprised in the high school. Some of it begins in the grades somewhere after the "three R's," and stops somewhere in the university. It is coming to be the accepted understanding that secondary education should commence where the "three R's" leave off, that it applies the rudiments to the attainment of information in applied lines, and that it ends where the university takes up the advanced work of specialization and research. In short, secondary education deals with the fundamentals of applied and advanced learning. For instance, secondary mathematics commences with applied arithmetic and ends with integral calculus. And so we find secondary education in America scattered among several institutions, upper elementary, high schools, and "lower division" university, disjointed in administration, lacking in unifying principle, and wasteful of the time of the students.

But we are on the eve of a change. What with our two great universities in California badly overcrowded, what with the high school entrenched in every modernized community, with teaching personnel and equipment improved beyond the college standard of a generation ago, the so-called "junior college" is coming into vogue. Again, here and there over the state, the high school is extending downward to include the two upper grades. Will the change be one of far-reaching centralization and readjustment of secondary work in the greater high school? or will secondary education continue to be disjointed among two or more separate institutions? For there are some disquieting signs of a five-group system, elementary, "junior high," high, "junior college," and university schools, each a thing apart and too much in-and-for-itself. The old preuniversity 8-4 plan begins to split up into something like a 6-2-4-2 plan. Happily there is the 6-6 plan, also under way. These two trends, upward and downward, are likely to coalesce into the 6-8 plan. Better yet would be the 5-3(3) plan; for surely if the Germans can cover the pre-secondary ground in three years, and the French can cover it in four years, then Americans can cover it in five years. Furthermore, if there is to be a flux and reform of secondary instruction, and if the movement is now under way, and in this commonwealth of ours I believe it is under way, then, now is the

time most opportune to take stock of shortcomings in order to shape readjustment for the elimination of these shortcomings, and of the conditions and defects that are causal to them.

What are these defects? They are many. They are partly chargeable to social and economic conditions. The more salient of these defects, are they not comprehended in a lack of fundamentals and at the same time in a lack of practical preparation? Language, history, mathematics, science, semivocational training, in the high school curriculum, are they not too mutually exclusive, the one at the expense of other studies? And in these fundamentals, do we not lack in broadness? For boys in the high school, two years of mathematics or less, and if they do have as much as four years, still no algebra of variables, in the field of practical higher mathematics far more important than the algebra of constants. One science required for college entrance, or two at most, say physics and chemistry, and of biology nothing at all, to say nothing of the other sciences. Again, to meet the California university requirements for engineering it has long been impossible for high school graduates to include more than one year of history among the fifteen units required, and it may be just any history. And if some of us had our way, even that one year of history would not be required. And so on.

Allied with this lack of broadness in fundamentals goes the practice of free electives, in accord with that beautiful theory of affinity whereby mere children, ignorant of themselves and of the world they have got to fit into, are drawn to just those studies which develop and complete their native abilities. What do we find, you and I? Students going with the swim, like fish, regardless, or feeling for credits along the lines of least effort, laziness more operative than self-interest.

Again, each textbook all too much has been written up and the study taught as a separate culture-unit, culture in-and-for itself—all the more cultural if it doesn't consort with any earthly utility, one semester for this branch, one year for that branch. The point is that any thoroughness is a lost by-product, for memory begins to unload the cargo before the bill of lading certifies to so much credit for so much cargo. This defect is part-and-parcel with the general lack of continuity and distribution over time. What can we expect when algebra, for instance, is jammed through in one year, much of it under conditions of immaturity? In Europe algebra is distributed over five years, so often a week, and correlated with much other work. Other mathematics likewise. And mark you, competent critics like Professor Young of Chicago and President Pritchett, agree in telling us that our secondary mathematics, to cover the same ground, use up 75 per cent more time.

Then there are the foreign languages deferred too long, for our students get at them long after the nascent period of word-assimilation,

with the result that their command over languages becomes greatly attenuated. In the high school, as in the university, languages afford a less irksome means of earning credits. Surely, if foreign modern tongues in our schools serve no better purpose, if they have no further part in our lives than they do in about 98 per cent of them, then they ought to be cast out, just as a university professor has told this convention that they ought to be cast out—to some consternation, let many of us hope. And yet, what knowledge so broadening and fructifying as foreign languages, say, French and German, to him who uses them in his life-interests, in keeping up with so much world-thought that doesn't get translated? What other so potent means for world-mindedness, of sensing the spirit of a people, save through the literature in which that spirit actually expresses itself? Who are the most enlightened nations and the most progressive? Who are the most insular and hidebound? The outreaching types or the stay-at-home types? The Germans put it well. "He that learns to think in another tongue becomes twice a man." It is a mistake to assume, moreover, that spirit, humor, thought entire, carries over into translation. For in a French novel done into English do you catch the humor and the spirit, the feeling and the atmosphere, when Frenchmen are made to talk English? Therefore, foreign languages do have a place in any well-conditioned high school, because they do, like English, each from its own angle interpret to us a greater world and a larger life. If I seem overmuch to dwell on this matter, it is because of the fire that recently has been leveled at foreign language-study.

So much for some of the salient defects in our secondary schooling. And what of the results? Are they not about what we have a right to expect? Education has taken in spots where some interest caught on. Studies are "subjects" that have been "had." Students do have what they were striving for—credits and records, so many and of rank so-and-so. How much mastery is there, or foundation for mastery? What are credits good for in training-values? What can students do with their knowledge? The most of it is shelved along with the text, except what the pupil finds sticking to his finger ends by use and practice. It is sediment down in the subconscious. To dig it up he has got to resort to books, and after all it is something to know where to dig. There is the usual incapacity to apply what one has learned, inability to turn the key that unlocks opportunity, or the key doesn't fit. The high school gets knocked, and the university gets knocked in turn. Education under fire. Something is wrong. You and I know it. The thinking public knows it. Europe knows it abundantly, and is not slow to lay the finger on the soft places. Our Rhodes scholars are the supercream of our scholastic output. The English have taken stock of them and have found them wanting. The Fresno High happens to have in its faculty a Rhodes scholar, three years at Oxford.

He told me last week the English are right, that the Americans are weak in essentials and undertrained. Don't we realize that whenever we talk with educated Europeans? How they do take us back with their firm grip.

In our efforts to educate we have hurried youth through its paces. Knowledge fails, and ability is undertrained. But we lay great store by "general training." Granted that a student is unable to really read Latin after four or six years of it. The training value is good. Grant that he can't apply the algebraic equation or a principle of physics. The general idea is there, nevertheless. Granted that he has forgotten 95 per cent of history and is mixed on the rest. He has a general idea what history is about. All very good, as far as these ideas go. But how far do they go? What is learning worth when it can't be transmuted into something more usable than general ideas? Here we land up against the general training fallacy and the culture fallacy. Have we not put the cart before the horse? What a student really needs, and what he should be getting, is knowledge that he knows he has got, and which he knows how to use if he has brains enough to use it. Given that, and general training follows as a matter of course.

Are we not deluded by false values, and do we not substitute false ideals for true ones, oftentimes self-flattered and encouraging self-flattery? School spirit, for instance, too often a sort of militant bigotry, is deemed a grand virtue, even if a student is a trifle and a failure. On the continent of Europe there is no school spirit as we know it, neither in the universities nor in the lesser schools. Like Gulliver's definition of untruth, school spirit "is the thing which is not." There, strange to relate, they idealize not institutions of learning, but learning itself and the lights of learning.

Now, what do we mean by education? Is it not power? ability?—ability to comprehend relations truly, to understand the forces of nature, to know the behavior of matter and to manipulate it, to know life and to manipulate life, to sense right and to do right, ability to understand civilization and to promote progress; in short, power to adapt means most suitable to ends that are useful and worthy.

I have dared to criticize our secondary education on account of what it is not, and on account of what it can be, because I have faith and hope for betterment. What men have done, men of the same race can do again. It lies in the strength of our race heritage to work up to as good a brand of education as has been created by our European congeners. But we have got to leave our rut of heterogeneous culture stunts, because they so largely lead nowhere. We have got to reconstruct method on lines that are scientific and lead somewhere. The reconstruction must line up with world realities and must square with sound principles.

In the first place secondary education must comprise the elements that are fundamental and common to the interests of all men. For all men command of language in the way of intercourse is a constant advantage, and literature is a common resource. All men have a common interest in civilization, and so need to understand its historical development and its institutional antecedents. All men share in the benefits of science, and science affords opportunity in proportion as they have intelligence to make use of their knowledge. The same holds true for mathematics, which functions endlessly in the practical problems of everyday life, in industry, and in science. Hence, language, history, science and mathematics are fundamentals essential to everybody, and training needs to be adequate and commensurate with ability. Though men differ in aptitudes and fortes, opportunities and destiny come rather regardlessly, whence all the more need for general and sound fundamentals. Yet, because men do differ in aptitudes and capacities, education has also got to deal with studies that develop and strengthen these, and arm them with special equipment. The fundamental and the special, the cultural and the practical, must supplement each other, play into one another's hands, for truths and facts go together. The world is a unity, and world learning has to be unified. In a rationalized system of instruction the components are not contradictory, the general to the special, the cultural to the practical. They only need to be brought into cooperative relation.

In the second place, education that arrives and stays put must be a growth process, adapting itself to mind-growth. The materials have to be assimilated, since all growth is by assimilation—a gradual and long-time process. Hence the elements that go to make up learning and training must be applied often and variously. They must be usable, and by use, actual and often, become bone and tissue.

No heresy lurks in these statements. They are as commonplace as orthodoxy. These ideas are not new, and they certainly are not original in this day and age. Why do they need repeating? Because they are so nonexistent in American vogue. In the Old World they have been the accepted practice for generations.

No indictment lies against our elementary education. Its results are satisfactory. It arrives and stays. Why? Because the "three R's" are necessarily continuous and correlative, and there is less disintegration from lack of application. They are in use and grow in usefulness. But our secondary education does disintegrate despite our unthinking assumption that because a study is pursued it is going to linger in the memory and give value on demand. Cramping the mind with masses of material too unrelated and indigestible blunts the nascent insight and largely inhibits the use of the understanding. The right method stimulates the insight and exercises the understanding by making

insight and understanding necessary, and applies the stimulus and the exercise progressively, recurrently and in new connections. Herbart's doctrine of apperception, you may say, an article out of the pedagogy shop! Yes, but a law of organic growth.

Suppose, instead of our cramming-jamming-shelving system of short-time units lacking relation, we came to introduce a system of long-time distribution. Suppose, for the sake of simplicity, that we had a secondary plan covering nine years, in three three-year cycles, following, say, after the fifth grade. Suppose the fundamentals to be distributed about as follows: English and literature for nine years, on an average, three times a week; history for nine years, two times a week; for boys, mathematics for nine years, three times a week; for boys, science, for nine years, three times a week. About half of the total time would be available for free electives in the line of music, foreign languages, and special training, prevocational and vocational, likewise distributed and correlated.

Consider the possibilities in history. The first three-year cycle could be devoted to the biography of the great history makers in chronological order. Of course, much political history would get woven into the lives of the heroes. The second cycle could cover the salient features of political history, the great social drama, with the great men as actors. The third cycle could cover the development of institutions, the history of genius and what genius has done for civilization. Mark you that the history study would thus proceed in recurrent and ascending cycles, bringing out old facts in new connections. That would be some history.

See what this plan could do for the sciences, or better, nature study. Three times a week, each cycle for three years would deal with astronomy, geology, physiography, chemistry, physics, botany, zoology, theoretic and applied, coordinated and correlated, recurrently ascending and in new associations adapted to the growing understanding, and stimulating more understanding. The student in nine years would come to know some science.

Mathematics likewise could be covered in similar recurrent and ascending cycles, commencing with applied arithmetic and ending with integral calculus, each cycle adapted to the growing powers of comprehension, and find application to endless uses.

So on and so on with other lines of work, fundamental and special. You see the point to all this. Note, too, that each three-year cycle should be relatively complete, adapted to the needs of the student who would quit upon finishing that cycle and at the same time get the best training for the next cycle in case he continues his education. This, again, is not theory-stuff, but actual practice in Europe, particularly in the gymnasia of Germany. All the comparisons of method expressed

and implied, in this paper, go far to explain why American secondary education is superficial and inefficient, why in Europe it is thorough and efficient.

What stands in the way of a similar study-plan in America? Not a plan patterned after Europe, but a plan worked out on the same essential principles to suit American needs. Very much stands in the way—precedent, prejudice in favor of the accustomed vogue, something we must stand behind just because it happens to be ours. The teacher stands in the way, by training unsuited for functioning in a manner alien to experience. But not all teachers. It will never do to object that a correlated system admittedly good for countries under aristocratic rule is not suited to America, with its democratic regime. Our medical profession in America is not at all slow to learn and to adapt foreign discoveries and alien practice. The X-ray, which is good for the European, is also good for the American, even though discovered by a German professor. Educated efficiency is needed by all nations alike, and for like purposes. European efficiency in endless lines has demonstrated its superior ability to make good in America, and is ever in demand. It requires more than fine high school plants and costly equipments and expensive teachers to make education the individual and national asset it is intended to be. In the face of besetting shortcomings, educators can't afford to be standpatters, ostrich-like sticking their heads into the sands of self-complacency. The shortcomings are apparent enough as due to lack of distribution and correlation of secondary studies. Big sounding words, these, to the layman, that mean nothing more far-fetched than the "three R's" philosophy practiced in our elementary schools, and in the European secondary schools as well.

Is the unifying plan feasible in California? Yes, by degrees, and not so long-run, either. Upward and downward extension in our state is actually under way and is acquiring a stable momentum. The occasion is ripe to work toward the elimination of the disjointedness in our secondary schooling that stands in the way. The greater high school makes possible the kind of study unification heretofore impossible. Distribution of studies for long-time contact, is the first step, easy enough for school administration to effect. The second step consists in correlating the studies. That step is harder, but strength to take it will develop later out of the then necessities and opportunities.

The natural resources of a country are a tremendous gift of nature. To husband them advantageously is a national necessity. But the resources inherent in intelligence are still more tremendous, and to develop these most advantageously is of supreme importance to national strength and progress. Unless secondary education prepares men and women efficiently, it prepares wastefully and not well for either citizen or state.

THE UNIFICATION OF SECONDARY EDUCATION IN THE GREATER HIGH SCHOOL.

W. H. Housh, Principal Los Angeles High School.

The creation of the intermediate school and junior college calls for reorganization of the school curriculum from the seventh to the fourteenth year inclusive.

The intermediate school by taking students at the end of the sixth grade expects, by better equipment, better trained teachers, and a more flexible course of study, to send those students to the high school at the end of the ninth grade further advanced than formerly. Adjustment is therefore necessary with the lower school.

The intermediate schools, by beginning foreign languages in the seventh grade, and algebra and other high school subjects in the eighth, may be able to promote students to the middle of the tenth grade, thereby saving them a half year; but in the interest of sound scholarship, it is to be hoped that they will utilize their superior facilities to secure more thoroughness in the fundamental subjects, and place less emphasis upon shortening the high school course.

My part in today's discussion will refer to the junior college.

Doubtless every junior college in the state hopes ultimately to accomplish the twofold object—to meet the specific needs of the community and to prepare for the advanced classes of the university. It is not surprising, however, that the investigating committee of the university should report that they found the junior colleges modeling their courses after the lower division of the university instead of administering to the needs of their respective communities.

In my opinion the junior colleges have shown a commendable prudence in emphasizing at first the cultural side of their work. They are able to do this at once and in the main acceptably. They can get instructors, qualified by training and experience, to build up departments that correspond to those established and standardized in the colleges and universities. There is little risk in beginning with standardized college courses. The junior colleges, if given time and encouragement, will without doubt prepare for junior standing in the university.

The other phase of college work—meeting community needs with vocational instruction of college grade—is more difficult, since time and expense are necessary to make a systematic investigation of local conditions, and to devise ways and means to meet industrial and civic problems. It calls for discriminating judgment and for cooperation of all the constructive instrumentalities in the community.

The Los Angeles Junior College began with about forty students, in my opinion about the minimum to justify the expense of organization. Now with an enrollment of 300 we are able to carry almost all the

lower division courses of the university with an average class enrollment of twenty-three students. The cost per capital is now but little more than the per capita cost of high school students.

The General Culture courses now given in practically all the junior colleges prepare for advanced courses in the university, and at the same time meet one important community need, namely, lay a foundation for the professional vocations.

The Technical Engineering courses as given in junior colleges, of which the Los Angeles Polytechnic is an example, seem to have met the demand for vocational education along engineering lines.

I would suggest the following courses, one or more of which might be undertaken to bring the junior colleges into close relation with the communities they serve.

1. Semiprofessional courses, that are broadly vocational, *i. e.*, economics, political science, journalism, industrial chemistry. These are now given in the largest junior colleges, and supplement the courses in general culture.

2. Courses that prepare for the higher forms of civil service.

A year ago Professor Lange suggested that the junior colleges would find a fertile and almost virgin field in the preparation of students for service in the various departments of city management and municipal housekeeping. He said the junior colleges would be pioneers where the universities had as yet scarcely ventured.

Since then there seems to have been a somewhat general awakening on this subject in Eastern educational as well as civic institutions. In the March number, 1916, of the *Annals of the American Academy of Political and Social Science*, an article by Henry Moskowitz, president of Municipal Civil Service of New York City, calls the attention of public schools, high schools, colleges, and universities to the need of training for civil service.

In November, 1916, about 75 universities were represented at a conference at the University of Pennsylvania, under the auspices of the Society for the Promotion of Training for the Public Service. At this conference, publicists, social workers, and educators discussed the problem, "how professional training should be modified to prepare men better for public service and to reinforce or develop efficient public administration."

The door of opportunity opens unmistakably upon this form of community service for the junior college. The senior year of the high school and the two years of junior college, being under the same management, will afford a fine opportunity for three years training in graduated courses including the civics and social problems classes of the high school, and the economics, political science, and sociology classes of the junior college.

This field has the advantage of being open to the girls as well as to the boys, especially in social service work. Recent experience in the city

of Los Angeles shows the need of trained women in dealing with the wards of the Juvenile Court, with the education of foreigners, especially the immigrant mothers, and many problems connected with the temptations thrown about young people, some of which are closely related to the public schools.

3. Agricultural courses.

Many junior colleges can carry courses in scientific farming, especially if they work in cooperation with the patrons of the school, and confine themselves to one line of work.

Los Angeles High School and Junior College contemplate a course in plant propagation and landscape gardening when we move next year to our new site of 21 acres in western Los Angeles. Knowledge of plant propagation, acquired partly in classroom and laboratory, and partly in the field, will not only give fundamental preparation for success as landscape architects, but for success as practical gardeners, nurserymen, and farmers. Such a course will satisfy the demand for a city beautiful and at the same time the equally insistent demand for lessening the high cost of living.

4. A Junior College Department of Commerce.

There is no doubt of a demand for schools of commerce. The cooperation of the Chamber of Commerce and of the other commercial bodies will be assured, if such a department is formed, especially in urban communities. Such a department could not only train experts in accounting, salesmanship and business efficiency, but could graduate men with an insight into national problems of developing the varied interests of the country; with an interest in the distribution of products and the conservation of resources; and with a knowledge of business methods and business conditions, domestic and foreign. This course would form the basis of an education for positions with the federal government and with the foreign consular service.

Before specialized courses are organized the needs of the community should be ascertained by a systematic survey. Surveys are now being made by the state university, the State Board of Education, the State Teachers Association, and other bodies. The junior colleges could cooperate with these organizations: gathering and tabulating statistics being considered laboratory work for classes in political science, economics, and sociology.

I am not convinced that the universities will be able soon to discontinue their freshman and sophomore classes, but that there is a possibility makes it obligatory upon us to proceed without delay to secure the cooperation of the commercial, the industrial, and the civic bodies in the reorganization of the curriculum of the greater high school.

The result will be an American system of secondary education that will answer the needs of a democracy better than a transplanted European system that might contribute to the creation of a caste system in America.

THE CORRELATION OF THE WORK OF THE JUNIOR COLLEGE WITH SECONDARY STUDIES.

F. S. HAYDEN, Principal Citrus Union High School, Azusa, Cal.

The correlation of junior college and secondary work must be determined on the basis of what is to be the future relation of the two phases of work. In other words we must consider this question in the light of certain fundamental principles of education which have received considerable attention in this convention, namely, the principles underlying the reorganization of secondary education.

We are prone to think of any new educational movement as being invented and propagated by educational leaders. This, however, is not usually the case. There is often a growing demand for reform on the part of the people and this demand is felt and interpreted by educational leaders. Thus it has been with the junior college. Many parents recognized that their boys and girls were graduating from the high school too young and immature to send either out into the world or on to the university. Hence they kept their children in high school for a fifth and often a sixth year, taking additional courses in our elective system. When such students came up to the university they were able to present, not only the required forty-five entrance units, but from ten to twenty-five additional units. The university was eventually called upon to grant some credit for this work which they considerably did. The state then added to its statutes a law allowing high schools to establish postgraduate courses paralleling the first two years work at the university.

Simultaneous with this demand from the home came the feeling on the part of leading educators that the university was struggling with a problem in adolescence which rightfully belonged to the secondary field and the home. Dr. Lange of the University of California says, "that for the great majority of boys and girls undergoing secondary school training, the American four-year high school begins too late and ends too early. A remedial readjustment, it has been seen for some time, must consist in the lengthening for all concerned of the course for adolescents." The home had not given the problem a pedagogical name, but, nevertheless, the parents recognized the problem and ask of the schools a solution. These two movements, the one from the home and the other from the university, met just beyond the border line of the secondary school and culminated in the junior college.

Another demand which came from the home in conjunction with this movement was the call for efficiency. Parents felt that their boys and girls, especially those who were not to go on to the university, were not, at the completion of their high school work, adequately prepared for life. They were young and their faculties not fully developed. Mr.

Barnett, manual training teacher in the Alhambra High School, said to me a few days ago, "There went out from my shop last year a boy of whom I am justly proud. He had spent six years in the school and had a mastery of himself and of his manual training work that will make him a success." There has gone out from our commercial department at Citrus Union High School during the last year or so, two or three students of whom we might say the same thing. They rounded out their commercial work with a year or two of postgraduate and junior college work and gained sufficient mastery of themselves and of their work to enable them to take up and satisfactorily fill positions of responsibility in the community. Again, as in the case of the adolescent problem, the educators have treated this problem under the need for industrial education and vocational guidance. Without applying the pedagogical name, however, the home has again voiced the need. For these reasons it seems to me that there is need for the junior college, and that it has a place in the secondary field as an upward extended unit of the high school.

In a recent "questionnaire" sent out to several junior colleges I asked two questions which bear on this problem:

1. Estimated percentage who would not have been able to continue advanced work without the junior college.

2. What benefit does the community derive from your junior college?

Answers to the first question are shown in the following table:

Junior College	Enrollment	Question 1 (per cent)
Hollywood	116	33
Fullerton	48	75
Santa Barbara	32	20
San Diego	35	25
Fresno	106	75
Santa Ana	24	75
Chaffey	60	25
Ponoma	54	40
Anaheim	18	85
Citrus	36	75

Another phase of this "questionnaire" which commends itself to our attention is the community service being rendered by the junior college. If an average of 45 per cent, and in some communities over 75 per cent, of our students reached by this upward extension work would have had no other opportunity for advanced work certainly the junior college is filling a definite place in community life. Another question asked in this questionnaire was, "What benefit does the community derive from your junior college?" It may be interesting to note replies received on some of the blanks. Fullerton replies that the benefit to the individual student is a benefit to the community. San Diego says,

"We hope to make the junior college a 'continuation school' for the community." Fresno expresses the community benefit as "the opportunity for a more complete preparation for life. This enlarges the view and raises the standard even for those who do not take the longer course." Santa Ana points out the financial saving of \$500 for each student per year and the prestige given the city by having an institution for advanced work. Pomona says the junior college affords an opportunity for "a considerable number of young people to continue their school work along college lines at no other expense to the home than textbooks and similar incidentals. It holds for advanced work a considerable number who might otherwise leave school and drift into the various lines of work, and perhaps away from further thought of continuing their school work. Anaheim says that the junior college gives education for less money and keeps the boys and girls at home for another two years. Chaffey Union High School calls our attention to three distinct advantages of the junior college: (1) financial; a probable saving to patrons of from \$5,000 to \$10,000; (2) educational; greater interest among students and people generally in higher and specialized education; (3) moral; closer check on young people during their adolescence.

These replies indicate that the conception and aim of the junior college is not primarily preparation for the university. Dr. Lange says, "The junior college will function adequately only if its first concern is with those who will go no farther, if it meets local needs efficiently, if it turns many away from the university into vocations for which training has not hitherto been afforded by our school system." If the junior college seems a little slow in determining these needs we must remember that the high school has not yet completely solved the problem. The junior college will give an opportunity to round out and complete much of the work of the high school. To this end continuation courses in agriculture, industrial arts, commerce, household economics, and food chemistry should be introduced. Fifty per cent, at least, of our students at Citrus are interested in courses that will in some way function in their immediate community life. This does not mean that the course needs to promise immediate financial return in some community profession. If it enriches the life of the community through the student it has given its contribution. We have in our junior college several normal graduates who are rounding out their normal training with a course in economics, or music, or English, or household chemistry. Last year one mother who had two daughters in the high school was taking English, art, economics and household chemistry. Several adults from the community are taking language, music, art, commercial work, surveying, English and economics.

The courses of study in several of our junior colleges show an attempt to meet this problem of social efficiency. Hollywood offers a course in physics and bacteriology of the home, another on general botany. Fullerton offers a course in history of the last century. Our courses at Citrus in economics, psychology, English, surveying and chemistry we consider very practical courses. And yet, all of this is but a promise of what must be. As in the high school the old order must change, giving place to new. In a pamphlet sent out by Commissioner Claxton last year the question was asked, "What are you doing in the way of high school extension work?" This is a question for the junior college to answer. The university has been boldly struggling with the problem of extension work in spite of the handicap of distance and community initiative. The junior college has an immediate community touch, and with the inspiration of the university from above should be a great agency for social welfare. In a recent letter received from a city superintendent in southern California regarding a certain teacher the question was asked, "Has she any community interest?" Practically every blank for rating teachers at present takes this community value into consideration. What is the purport of this? It means that a teacher with community interest can relate her work to the community life without which the work stands as an isolated unit. Our civics and economics teacher has had his students working on several charts of city government, local labor and agricultural conditions. Our mathematics classes have carried their study of graphs to a practical end by working out comparative studies of athletic and scholarship records and of gas and electric rates. Even a teacher of the classics can better relate the lessons of Greek and Roman civilization to modern life if she is an active part of that life. History and language and English and every other subject that delves into the treasures of the past is of no great value unless it throws some light on the problems of the future. Our young people must dream dreams and then must see some possible practical realization, in part at least, of these dreams.

This emphasis upon the community obligation of the junior college may seem to imply that the business of preparing for the university should receive little consideration. Not at all. We have in recent years reversed the old maxim that used to read: "What prepares for the university prepares for life," to read, "What prepares for life prepares for the university," for if the university does not prepare for life what planet or world does it prepare for? Our old theory of "mental discipline," thank goodness, has exploded. If a child must have mental culture we feel that he can get it just as thoroughly and just as nobly from a well-organized course in agriculture or household chemistry or community civics as in some dead subject taught under

the old cultural spirit. I do not mean that we need to throw out the classics or mathematics. They can be taught in the new spirit of education.

"Yet, I doubt not thro' the ages one increasing purpose runs,
And the thoughts of men are widened with the process of the suns."

I mean that the 99 per cent who never receive a college degree will go much farther in their educational work if we take the every-day materials with which they work and weave them into a science which will enable and enrich life. The universities have recognized on their entrance lists such subjects just as rapidly as the secondary school has proved their educational worth. They will do the same in the case of the junior college.

Many subjects, however, will aim only to round out the high school student's education and give it vocational completeness. The city of Chicago is recognizing this mission of the junior college by adding to their great Lane Technical*High School a continuation course of two years "to give the student," in the words of their Junior College Bulletin, "that training which will enable him to meet practical problems, or to pursue courses of advanced character in other institutions."

In view of these problems and advantages which attach themselves to the junior college I do not see how it can ever properly relate itself to the great work of education except as an integral part of the high school.

I believe the junior college has a future as a part of the great scheme of secondary education. It has found its place as an upward extension of the high school. It has passed the experimental stage in California and has received the sanction of the high school, the normal, the college and the university. If the educational system can be so organized as to fit the physiological and psychological changes in the life of the child; if the materials in our educational laboratory can be so selected and taught as to be alive and vital, and then if the child with his education can be properly related to his community we shall be working toward the golden era of citizenship and democracy.

CLASS AND STUDENT BODY FINANCES.

C. L. BIEDENBACH, Principal Berkeley High School.

When one thinks of the many serious duties of a high school principal it may seem absurd to expect him to give much consideration to a subject that is so lacking in dignity as class and student body finances: and, were these matters only what they appear to be on the surface, it might be justifiable to let them go with only an occasional inspection. There is so much involved in these money affairs, however, that a school does not do its whole duty by its students unless the authorities exercise complete supervision over these transactions. In fact, the real life, the moral and spiritual life of the school is at stake. We all agree that the morals of the young people are far more important than their intellectual development. We are in the habit of saying that character building is the real business of the school, and yet we go on laying stress upon courses of study, preparation for university entrance and such things, and give little serious attention to the money transactions of our students, failing to realize that the whole question of honesty in personal and public life is involved. In many schools graft is as fully organized among the pupils, and cliques and special groups control the student finances for their own benefit as completely as their elders do in the most graft-ridden community. Such institutions are breeders of civic dishonesty, but the principal does not know it, because he is too busy with other problems. Probably he believes in student control and conscientiously thinks that he is helping to develop the right kind of individuality by allowing his pupils to work out their own salvation. He assumes that these young people will soon take the place of their elders in the community and, therefore, should be allowed to do things while in school as they are being done in the outer world. This course will train them to take independent control when their turn comes. Were it not for the inherent desire of the human race to make progress in things governmental and social, this would be good philosophy. But the supporters of this theory forgot that the schools are not meant merely to initiate what already exists in the community, whether it be good or bad, but that it is their purpose to train each generation of pupils in such a way that it will be better than its predecessors, and, therefore, able to carry along a little farther the story of human progress. To do this pupils can not be left to do as they please. They must be trained, and that means control. To my mind, there are no problems in the management of a school which are so worthy of the close personal supervision of the principal as those which concern the private and social honesty of the pupils as individuals and as a body.

I do not like to mention personal experiences, and still less do I fancy speaking in public about the affairs of any particular school, but

since my address will be of very little value if it concerns itself only with generalities, I find myself forced to do so. When I was placed in charge of one of the larger high schools, I found that the students had been allowed to enter, independently, into all sorts of financial transactions among themselves and with the outside public, and that they were handling the money involved according to the ideas of right and wrong which they had gained from experience with the worst side of commercial life which, unfortunately, is the side usually presented to them by those petty young business men who seek their trade. The public and the school community had become suspicious of the methods employed and all sorts of ugly stories were afloat. For that reason things were in a very chaotic condition. In order to get at the real facts of the case it seemed best not to make too radical changes at once, but to follow a policy of watchful waiting and curb only flagrant misdeeds for a time. It soon became evident that individual students, backed by so-called clubs, which had all the earmarks of secret societies, were involved in money transactions of considerable magnitude, which were intended, ultimately, in one way or another, to result in their own personal gain or that of their supporters. It is not necessary to assert or to assume that individuals were stealing money. It is enough for our purpose to know that individuals and the clubs which they represented received the benefit of the money collected and spent, and not the school community as a whole. For instance, dances were held costing hundreds of dollars, which were attended by only one-fourth of the members of the class which paid the money, and by three or four times that number of outsiders who were the personal friends of the small percentage of the class which did the inviting. Again, sums of money running into the hundreds of dollars were spent for golden souvenirs and dinners given to athletic teams. It was plainly apparent that a favored few were getting all the plums. But, strange to say, special privilege had become so fortified in the school that the rank and file of the students believed that this was the necessary and proper manner of running things, and appeared quite willing to part with their money at the demand of the leaders in order that the superior minority could enjoy life at the expense of the common herd. It had become accepted as the natural order of things, because it was continually handed out as the proper caper, by the powerful few. If one of the mob wanted to get a share of the spoils, the thing to do was to get into the fight and organize a clique of his own. Only the schemers could win.

This attitude is characteristic of many student bodies, and I respectfully submit that it is most unwholesome. While the students may thus get a correct idea of modern business life, it is certainly not right for school authorities to allow this condition to prevail in their schools and

thus to train their pupils in the thought that it is the proper one. The school must be kept clean, no matter what the community may be. And when the right sort of life becomes the rule in the school, and in the colleges and universities, we may expect, in time, to have the same kind of life among adults. It would be useless to speculate on these matters were it not for the fact that it is entirely possible to obtain this condition of things in the schools. In fact, when we do not, it is hardly too much to say that the fault lies with the authorities rather than with the students. Pupils prefer a well organized and well controlled school and a thoroughly honest and democratic administration of their affairs when once they have experienced the benefits that accrue to them from such management. Of course there will always be protests when the privileges of the few are taken away, and these protests will be uttered in such a specious and insidious manner that even the best element of the school and the community will be influenced for a time. But it will not take long for the truth to make itself felt. Gradually, good order will come out of chaos, peace and tranquility will take the place of feverish restlessness, and a square deal for everybody will supplant individual greed and selfishness. When the principle of unselfish cooperation is established, then it will be possible to allow students all the freedom of action which they are capable of. There need be no lack of individual initiative, business training, or independent thinking, merely because these have to be conducted along right lines. In fact, there is more real personal, independent activity where all business is transacted in the open, since no one has anything to conceal; when all are working for the common good, and each can, therefore, give his undivided attention to learning how to do things correctly.

In order to show definitely the change in affairs after the school authorities assumed control of all class and student body finances, I have prepared a comparative statement of the senior class and student body receipts and expenditures extending over a period of four years. It reveals a great many very interesting facts.

COMPARATIVE STATEMENT. ASSOCIATED STUDENT FINANCES—BERKELEY HIGH SCHOOL, 1912-1916.

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PROCEEDINGS OF CONVENTION

Before the school assumed control Since the school assumed control

School year

1912-1913

1913-1914

1914-1915

1915-1916

	Fall, 1912	Spring, 1913	Fall, 1913	Spring, 1914	Fall, 1914	Spring, 1915	Fall, 1915	Spring, 1916
<i>Income.</i>								
Cash on hand	\$110 25	\$801 10	\$230 38	\$819 05	\$181 02	\$717 01	\$509 16	\$620 11
Dues	763 00	630 25	979 00	207 00	868 50	323 00	655 00	306 00
Games	762 15		157 00		201 25	12 50	157 10	3 75
Refunds received		131 65	12 50		57 00	20 25		9 00
Miscellaneous	9 00		1 65	19 82	63 22	03	7 80	5 00
olla Podrida sales	133 05	617 25	559 96	109 80	106 33	101 56	337 50	390 80
Total income	\$2,097 15	\$1,810 25	\$1,970 49	\$1,155 67	\$2,038 32	\$1,507 35	\$1,686 56	\$1,161 66
<i>Expenditures.</i>								
Football	\$819 90		\$303 58	\$5 85	\$292 00		\$198 61	
Baseball	15 10	\$237 90	12 00	11 00	41 00	\$139 81		\$51 95
Basketball	11 75	110 17	1 50	51 75	9 50	22 72	65	38 66
Band	11 50	1 85	30	*	*	*	*	*
Debating			18 55		3 00	6 50	2 25	8 25
Rowing	16 00		32 00	10 00	15 10	1 20	6 00	26 33
Swimming	16 00	19 80	11 65				27 65	25 80
Tennis	8 25	10 00	10 00	11 85	7 75	1 00	8 00	8 00
Soccer			11 55		5 00			
Track		179 25		51 99		102 60		7 20
General	90 05	171 80	31 35	62 41	211 63	62 01	101 40	42 05
olla Podrida	612 35	797 25	709 96	709 80	706 33	659 35	618 86	627 33
Total expenditures	\$1,693 90	\$1,528 32	\$1,151 11	\$974 65	\$1,286 31	\$998 19	\$996 45	\$838 57
Unaccounted for	2 15	51 55						
Cash for next term	401 10	230 38	819 05	481 02	747 01	509 16	690 11	625 09
Totals	\$2,097 15	\$1,810 25	\$1,970 49	\$1,455 67	\$2,038 32	\$1,507 35	\$1,686 56	\$1,161 66

COMPARATIVE STATEMENT, SENIOR CLASS FINANCES—BERKELEY HIGH SCHOOL, 1913-1916.

Graduating class	Since the school assumed control					
	Before school assumed control, June, 1913	December, 1913	June, 1914	December, 1914	June, 1915	December, 1915
<i>First term.</i>						
Cash on hand			\$21 05			
Dues (50¢ for all classes)			60 00	\$52 50	\$74 50	\$85 00
						\$33 00
Totals			\$81 05			
Reception			Public hall			
Rent and attendants	*	*	\$22 00			
Printing	*	*	23 70	20 25	\$21 00	\$3 25
Music	*	*	12 50	10 00	16 00	7 50
Refreshments	*	*	13 40	10 00	10 00	3 20
Decorations	*	*	2 20	2 25	10 25	10 90
Cost of reception			\$73 80	52 25	60 25	5 50
						24 85
Miscellaneous			\$7 25			
			3 86			
Cash remaining			\$3 39	\$0 25	\$14 25	\$29 50
						\$8 15
<i>Second term.</i>						
Cash on hand			\$3 39			
Dues		\$10 55	197 00	80 25	\$11 25	\$8 15
Senior play		8242 00	115 40	90 25	125 00	104 50
Miscellaneous		476 00	292 75	271 75	200 45	314 00
		75 00	32	1 22	11 36	258 00
Total income	\$793 00	\$425 70	\$529 96	\$363 47	\$331 06	\$496 75
						\$426 65
						\$312 50

When it had become evident, in the school that I am speaking of, that a definite announcement of the responsibility of the principal for the management of school finances was necessary, the Board of Education passed a rule forbidding all selling of tickets, collections, and expenditures of money by individuals, classes, or organizations in the school unless under the direct control of the principal or some teacher delegated by him. While this power is always implied, and while it is very easy to exercise when it is once the custom of a school, it can readily be seen that when it has become a habit for students to do as they please in the matter of handling school money, it will be very hard to convince them that a mere principal has the right to tell them what money they shall collect and what they shall do with it after it has been collected, board rule or no board rule. It is difficult for them to see that anyone has the right to suggest to them "what they shall do with their own money," as they phrase it. And it is next to impossible for them to understand that after they have been allowed to collect money for a definite purpose, that that money becomes a special fund which can be used for the specified purpose only, and then strictly in accordance with the rules laid down for its disbursement. Yet, this is the foundation upon which all successful management of funds raised by students must rest. All collections and all expenditures must be authorized beforehand, and only after a full understanding of the merits of each case. A budget must always be prepared. The principal of the school must be the legal and moral trustee of all school funds and must hold himself strictly responsible.

Before the passage of the rule just referred to, the finances of the school were always tangled. Money was wasted, funds were exhausted, bills were left unpaid, becoming part of the inheritance of future classes, and much money was never accounted for. After the rule was passed a system of control centering in the commercial department was inaugurated, and soon all of these troubles disappeared. There are now no longer any deficits, unknown bills, unauthorized purchases, dissatisfied merchants, fraud or graft. This is due to the fact that no expenses of any kind can be incurred for anything purchased in connection with any student affair without previous written authorization, signed by the person authorized by the principal of the school. There has been no reduction in the number of school activities; on the contrary, these have increased, until now nearly all of the students take part in something. On the other hand, expenses have been very much decreased and more is obtained for the amount spent. As I related before, a class party four years ago, which was attended almost altogether by outsiders, cost \$204. The present high senior class has held, during this term, two such parties, attended only by members of their

own class, which together cost \$47.35. The class four years ago spent \$448.75 on a play which was not nearly as successful from an artistic standpoint as the one presented this term, which cost \$198.82. The student board of control, which was in existence four years ago, spent \$849.90 on the school football team, whereas the expenses of the present team which, by the way, won the state championship, were \$212. Student dues four years ago were \$2 a year, and did not secure to the students the privilege of attending interschool games, whereas the present dues are \$1 a year and entitle students to attend all games. Class graduating assessments used to run as high as \$5, and once reached \$7.50, whereas now the dues are limited to 50 cents and secure to the graduates the enjoyment of just as many functions.

The management of class finances has been reduced to a very simple system. After the senior class is organized, the officers consult with the vice principal, who is the senior adviser, and outline their plans for the year. This generally includes the production of a senior play which, under the present system of management, always produces a surplus, and one or two dances held in the school gymnasium. Each class expects to make a gift to the school, whose money value is dependent upon the money earned from the play. As soon as the officers are elected a budget is prepared and this becomes the basis upon which the necessary class assessment and expenditures are determined. Official receipt books are furnished to the class treasurer by the school auditor, who is the head teacher of the commercial department. All receipts and receipt books are numbered and must be returned to the auditor, and must agree with the deposits. Since the establishment of this rule three and one-half years ago no books have been lost and no mistakes have been made which have not been easily corrected when the books were properly checked. There has been no dishonesty and no extravagance.

Student body finances are handled in the same way. There being more at stake, the principal of the school takes the matter up personally. It is his custom to hold a meeting at the opening of each term with the student board of control, the school auditor, and other teachers who are especially assigned as advisers for particular activities. At this meeting the contemplated activities for the term, the amount of money on hand, and the money expected from dues and other sources, are fully discussed. A budget is then prepared, based on the amount of money in sight and the estimated expenditures for the different activities. Policies are outlined in general terms only, so that ample opportunity is left for the exercise of individual initiative on the part of the student officials. For instance, a definite sum is agreed upon for certain general activities. It is then their privilege, at their regular

meetings, to apportion from this larger fund to the special activities which come under this head. They also attend to all of the multitudinous details of management which are necessary to make their work effective.

Student body cards are issued from the auditor's office and sold to the students through their advisory teachers. The money is turned into the school treasury, which is under the supervision of the head of the commercial department. No money can be paid out of this treasury except for purchases made or services rendered, upon the written authorization of the person in charge of the particular activity concerned. A triplicate system is in use. The authorization is handed to the student, whose business it is to make the purchase, and a duplicate is filed with the auditor, who then has it in hand when he receives from the merchant the original authorization accompanied by his bill. The third slip is kept for reference by the person who had authority to issue the authorization. In this way no unauthorized purchases can be made and no mistakes can occur which can not easily be rectified. This method of financing the associated students has done away with the financial troubles of that body altogether. Although the dues have been cut in half, there is always enough money for all necessary activities and there is usually a surplus on hand to use for other worthy purposes. At the beginning of the present term, for example, a surplus of \$450 dollars was used to help establish a printing department in the school. There is also money enough to help finance the student publications such as the *Olla Podrida*, the school semianual magazine. Three hundred dollars is devoted to this purpose each term. This is done in order that the book may be published without advertisements. The school publications are also handled under the supervision of the school auditor. All contracts and receipts are official and all deposits are made in the school treasury. Under former conditions, when students made arrangements with advertisers as they saw fit, encouraged "trade ads" and collected without reporting to anyone, there were continual charges of graft and stealing. Under the present system all money transactions go through the proper channels, and there is no chance for any irregularity. As a result the papers always make a profit.

As an important incidental result of handling the class and student body finances in this way, mention should be made of the benefits accruing to the students of the commercial department. Not only do they have the opportunity of handling real money, but they also learn how to do business in a businesslike way. Since they are working with familiar things in which they have a personal interest, and all the transactions are fully within their comprehension, their work is as real

to them as their future business life will be. In fact, it is the same thing, because they are transacting their own business now, and it behooves them to make a success of it. They can no more afford to make a failure than can the merchant in his store.

As I have been outlining the difference in the school under the policy of license and under that of controlled liberty, it must have become evident that a complete transformation has been accomplished. High ideals have been established where formerly there were none. Devotion to the school and class loyalty have taken the place of petty personal selfishness. This appears in all of the affairs which take place in the school. There is no longer the spectacle of one faction warring against another to gain support for some function which that faction is interested in. Now the whole school unites to make a success of everything which the school endorses, whether it be a senior show, a freshman reception, or an exhibition of the arts and crafts departments. This spirit of devotion to the community welfare is bound to have its effect upon the individual lives of all those who are fortunate enough to come under its influence. Is it too much to say that each one of them will carry out into the future an ideal of civic honesty which will have an effect upon every part of life which he touches? Is it not easy to see how far-reaching would be the effect of a generation of students thus trained? Truly, fellow principals, here is a topic worthy of our most serious consideration.

STUDENT BODY AND CLASS FINANCES.

F. P. TAYLOR, Principal Girls' High School, Riverside.

Does it occur to you somewhat unique that this subject should be called upon to take your attention which should and can only be concentrated on the most vital subjects concerning secondary education?

I haven't the slightest doubt but that back of this will be found the ever-ready impulse of *public* inquiry.

In our own high school days there were no student body finances to worry the principal. Our football team bought its own suits, paid its own way, and who ever heard of an accounting of gate receipts? And so it was with the other organizations.

Student body finance of today is a very different question, a question which insistingly demands attention—a question which is the product of the developing cosmopolitan high school—a question which every high school principal must concern himself with, inasmuch as he is personally responsible to the parents, to the student, and to the Board of Education.

Were we to take a census of the principals present, I have no doubt but that 50 per cent would declare that they have tackled this proposition and solved it more or less to their satisfaction. Others of us have allowed the student finances to grow up like Topsy, healthy and vigorous, but with no sense of responsibility.

We shall discuss this question briefly from two points of view—first, the parents' and second from the students'.

Everything in the universe that has speed enough to damage itself, has to have some sort of braking system. The powerful brake on the high school *speeder* is *public opinion*. So far, this brake has been applied with the best of intention and consideration. It is up to each of us as principals to see that student finances do not become too steep a grade, causing the public brake to grip and burn.

The objecting parent we have always had and will always have, and it is an apparent necessity not to be lightly treated. Like other parents, they have their rights in determining the question under discussion.

The vital and important question for each principal to decide is: "What is a just per capita tax per year for student body and class activities in my school." That per capita tax will vary with the local condition of his community, all the way from 50 cents to \$3, and also upon the needs of his particular school. To repeat, this is the first and primal point to decide before student body finances can be settled in any school. And furthermore, it should not be left to precedent or custom, as these may be wrong, but a definite survey made to determine the correct amount. Where it is possible to do without any direct tax, then the indirect tax should be solved in a similar manner.

The second vital point is, that once this per-capita tax is fixed, it should remain practically stationary from year to year, unless it can be shown, first, that the wealth of the community warrants an increase; and, second, if that be the case, that there be a justifiable demand for a new enterprise requiring an increase in the per capita tax.

The principal who has the statistics to prove to the irate parent that his child is not paying more today than those of some years back, will have an unanswerable argument and will fully justify himself. We believe that the per capita tax, strictly adhered to, will satisfy both parents and public, and so is probably correct from a financial point of view.

Now from the student point of view:

We will premise our suggestions on this question with these two probable truths.

First—That the high school students' judgment on financial matters is not altogether reliable.

Second—That the American high school youth will not attend to business matters in a businesslike way unless pressure is brought to bear upon him.

While the desire to outshine and outdo his predecessor in class, athletic or entertainment activities is laudable and should be encouraged in a sane way, yet from a financial point of view the principal will always have to curb this tendency.

Student body and class finances are a vital factor in our present day modern high school, and we are failing in our duty if we are neglecting this one practical means of educating our youth to become better citizens.

There are no two ways of handling financial matters in a businesslike way. Business methods are cut and dried, and its only variation is its application to simple or more complex conditions.

The following suggestions of handling student body and class finances may be modified to suit the needs of the small or large school and will fit any student body organization:

First—The principal, the responsible head, must be the final arbiter as to expenditure and assessments.

Second—There should be an auditing committee, one of which is a teacher, whose duty it is to authorize all proposed expenditures and to audit all bills and books, both of student body and classes.

Third—It is preferable to have one treasurer for all organizations, including classes, who shall keep a ledger showing the accounts as they stand for each organization from month to month. Whether there be one or more treasurers, all should be under the direct supervision of the commercial department, in order that the books shall be kept in a

businesslike way. The treasurer should pay no bill unless O. K'd by the auditing committee in writing.

Fourth—No organization should be allowed to go into debt and no assessment should be levied unless it be for a definite purpose.

Fifth—There should be printed purchasing blanks. These should be made out in duplicate by the managers of the various organizations, giving thereon a description and cost of the needed article. After being O. K'd by the auditing committee, one should be retained by the treasurer and the other given to the merchant, by the manager, when obtaining the article. When the bill is sent to the treasurer, he will make out his check, obtain the receipted bill, and file same with the duplicate order blank, completing the transaction. By this plan both the business man and the school are protected.

Sixth—All tickets should be numbered and none should be given out without a receipt. Tickets received at the door should be partially destroyed, but retained for checking up.

Seventh—No money should be collected without giving an official receipt, the stub of which should be accounted for to the auditing committee.

I have not gone into the details of bookkeeping or of instructions to students, purposely leaving this to your commercial department.

It is safe to say that without some such general system as this, no principal will ever feel that his student body and class finances are properly administered.

Aside from the satisfaction of always being able to answer to those in authority, the principal will have the added satisfaction of knowing that his pupils are obtaining a very valuable experience in practical citizenship.

SUPERVISED STUDY.

By C. A. LANGWORTHY, Principal Redondo Union High School.

Supervised study is not a new idea with us. Six years ago when we as principal of the high school were invited to take charge of the grammar schools also, we introduced a form of supervised study substantially the same as that which is in successful operation in our high school at the present time. We previously had had four successful years with the system in the schools of Illinois, so that when we came to realize the force of that magnificent law of California which forbids home study for children under 15 years of age, we saw plainly that here in California, especially, was the place to establish supervised study, in the grades, at least.

The plan in Redondo schools previously had been to prepare a lesson and then recite it, prepare another lesson and recite it and so on throughout the day. The plan we introduced was simply to reverse the method. First, recite a lesson prepared the day before, then immediately study the lesson for the next day under the direct supervision of the teacher, recite another lesson prepared the day before, then study for the following day in the same manner.

At night, when the pupil went home, all of his work for the following day was prepared, and when the children reported at home that it was unnecessary for them to bring their books home, that they had their work all prepared, fathers and mothers could not understand and in the Parent-Teachers' Circle repeatedly asked for an explanation as to why it was that the children insisted that it was unnecessary for them to work at home.

In the upper grades 60 minutes each day was given to each major subject, arithmetic, geography, language, history, etc., 30 minutes of which was regularly devoted to recitation and the remaining 30 minutes to a preparation of the next day's work.

The system as operated in our grammar schools appears to be weak in one particular, namely, the inability of the average seventh and eighth grade teacher to comprehend the opportunity for individual instruction. Most of our teachers seem to think it is absolutely necessary to hold the class together. Accordingly, last year without making known the real reason why, we began the study of Dr. Frederic Burk's Monograph "C," the condemnation of "Lock-step Schooling." The results were gratifying indeed.

When Dr. Wilson came to the Fresno convention last year with a steamer trunk full of documents which he freely distributed among the members of the convention, we took home with us several copies to be submitted to our high school faculty for study and criticism.

We believed the time was near at hand when the methods used successfully for ten years in the grammar schools could be introduced into the high school.

Accordingly, last September at the opening of the school we prepared two programs, one of eight periods of 40 minutes each, following the established custom of the school. Another of six periods of 60 minutes each, which would make it possible to introduce real supervised study.

Some of our faculty questioned the advisability, some were hostile to the idea, but all were willing to give it a fair trial, consequently the supervised study program was put into effect.

Our school calls at 9 o'clock in the morning with one hour at noon and closes at 4. No detention period, no keeping after school. As in the grades the system works well.

Many of our teachers had worked out methods and plans which they were loath to abandon, consequently the greatest amount of freedom has been granted in the management of our classes. Some of our teachers who at first were hostile to the idea have completely changed and can not now say enough in its favor. Others are finding it more difficult to break away from their accustomed methods of class instruction. In order to improve the situation our faculty has begun a systematic study of a recent publication upon this subject by Hall-Quest of the University of Virginia.

We believe that Dr. Frederic Burk in his condemnation of "Lock-step Schooling" is fundamentally correct. We believe that supervised study is really a systematic attempt at individual instruction. We believe that in a few weeks all of our teachers will more fully comprehend the opportunities offered by the 60-minute period.

The noticeable results of our experiments are as follows: Less complaint from both parents and pupils. Less criticism and fault-finding on the part of teachers. The study hall problem has almost ceased to be a problem. The pupils when dismissed from their classes have their lessons prepared for the next day, or nearly so.

Doubtless many of you read an article in the November issue of the *Sierra Educational News* by Professor Proctor of Stanford University upon the "Waste of the Study Hall." Substantially the same questionnaire which was submitted by the writer of that article to over two thousand students, we have submitted to our pupils. We wanted to know how the replies of our pupils compared with others. Accordingly, we submitted the following questions:

First—What difficulties do you encounter when you attempt to concentrate your mind upon your lessons in the study hall?

Second—Does the hour period, part of which is given to the study of the next day's lesson, aid you in forming habits of concentration? Why?

Third—Where can you study to the best advantage, at home or at school? Why?

Fourth—How much home study is necessary for you under our present class schedule?

Fifth—Do you think that your study habits would be improved if you were given more complete instruction on how to study by your teachers? Why?

This questionnaire has brought to light a quantity of interesting material. We find that to question No. 1, 44 per cent of the pupils answered "No difficulties"; 40 per cent are disturbed, and 16 per cent did not answer. The chief objections to the study hall given by our pupils are as follows:

1. Absence of the teacher when aid is needed.
2. People passing.
3. Inability to concentrate.
4. Too much noise.
5. Talking at telephone.
6. Tendency to watch the clock.
7. Watch the study hall teacher walk around.
8. Want to see what is going on in the back of the room.
9. Spend too much time in the library.
10. Can not study with so many people around.

Answering question No. 2, as to whether the hour period, part of which was given to studying the next day's lesson, aided in forming habits of concentration, 80 per cent of our pupils say "Yes"; 12 per cent "No"; 8 per cent no answer.

To question No. 3, concerning the best place for study, at home or school, 62 per cent say "At school"; 32 per cent "At home"; 4.4 per cent "Either place"; 1.6 per cent no answer.

Replying to question No. 4, "How much home study is necessary for you under our present class schedule," 78 per cent of our pupils say they are studying at home and the average time spent upon their lessons is one hour; 19 per cent are not studying at home; 3 per cent no answer.

To question No. 5, concerning the need of more complete instruction on how to study, 36 per cent say "Yes"; 44 per cent say "No"; 9 per cent "Perhaps", and 11 per cent no answer.

The pupils' objections to more instructions on how to study appear to be the confusion resulting from the various methods presented by different teachers, and also a tendency to think of the rules for studying rather than the lesson itself.

The chief difficulty which we have found in the system is due to the fact that we hold school until 4 o'clock. The lengthened day leaves very little time for athletics. We have succeeded in condensing our

work from eight periods of 40 minutes each to 6 periods of 60 minutes each with most of our classes reciting but four times a week instead of five.

If it be possible to further condense our program into five periods of 70 minutes each, calling school at 8.30 and closing at 3.30, we believe we would have a better program with ample time for athletics.

We believe that after our teachers have completed the study of Hall-Quest; after they have studied the replies on the questionnaire; after they have learned how to cease talking and get out of the way of the brilliant pupils, then they will come to realize the wonderful advantages and opportunities afforded by supervising their study periods.

THE ORGANIZATION AND EFFECTS OF SUPERVISED STUDY.

MISS ETHEL PERCY ANDRUS, Principal Lincoln High School, Los Angeles.

As chairman of the committee whose report on Supervised Study was handed to you by Dr. Wilson at the last convention, I need not tell you that I am heartily committed to the plan. It is a catchy phrase, this supervised study, and has a marvelous and numerous offspring of definitions. With us at Lincoln High School it has grown to mean the study of the advanced lesson under the direct supervision and with the cooperation of the teacher who will hear the recitation of that lesson the next day, and it is, we think, dependent for its technique and value upon five essentials: the time, the place, the student, the teacher, and the subject. In other words, as we see it, supervised study must be made to order to suit the conditions, not the conditions to suit the plan.

With us at Lincoln High School it just grew. It wasn't, properly speaking, supervised study at all at first. It was simply the conviction forced upon us that we could save the individual pupil, we could safeguard his health, his standing in school, could help him form correct habits, ideals and interests, if the individual teacher, even without the pupil's knowing it, directed his study time and study attitude. This came about through our need of conserving the scholarly habits of the 47 fellows who came out for football, and the subsequent success of their being personally conducted, unconsciously on their part, through the term. Certainly this was not yet supervised study, only kindly interest and individual study help.

Football had demonstrated to us that a man simply can not do his best unless he is at his best, and we had our physical weaklings just as you have yours. We found 10 to 15 per cent of our entrants were retarded two or more years, 5 to 8 per cent at least three years. Our school physician assumed that only a relatively small proportion of this retardation was due to mental deficiency. We used liberally our advanced Commercial students for stenographic records of tests and to look after record files. We used unsparingly teachers as field workers. We learned the reasons given for failure; we learned, or we thought we did, the causes. Where bad hygiene was at fault we have been able to work wonders. Where medical and clinical help were needed we first won the parent, and the rest was easy. Where the cause was laziness, due to infirmity of the will, we used favorite teachers and the admired older student as sponsors, and with hardly an exception all these restoration cases have blossomed like the green bay tree, this time, you see, under the supervision of someone chosen by the child. Still we have not supervised study, but we were now thoroughly convinced that individual interest would work miracles, and that the method followed was not so important as the personality of the teacher, his enthusiasm and interest; we knew that we were saving to the school many who through utter discouragement would ordinarily have left us.

Now we had our backward boys and girls alert and anxious. They wanted to do the work, but they feared they could not, and we knew it. So we faced the conclusion that these children should not be forced beyond their ability, whether over age or under, that the subjects should be so modified that they might be able to learn what was absolutely essential for progress in the shortest time possible, so that they, too, might go on with the consciousness of triumph. This presupposed having in our faculty teachers who had acquired aims and purposes regarding manner and method and results they hoped to realize. And so came about our opportunity classes in English and Mathematics.

Instead of making these opportunity classes dumping grounds for all kinds of troublesome cases, the physically defective, the merely backward, the truants and disorderlies, those making up lost time through illness and late entrance, and the border liners, we felt we should have classes not to relieve the regular classes, for then the effect would be negative. They must be for themselves, not for others. We must grade the students best to help them; so we made tests. Frankly, we did not use the standardized tests because we felt we could not do so efficiently without considerable practice and study in test administration; so we used our own. We found 30 per cent above grade in ability, 25 per cent below grade. We felt that special provision should be made for those two groups. The result is five beginning classes, one class making two terms in one term, one class making three terms in two terms; two classes doing graded work, one class doing two terms in three terms, all classes of the same grade beginning running at the same period and so affording flexibility.

We found we must handle the accelerant group differently from the normal or the slow moving. The Spaniards have a proverb which says, "The good is enemy to the best." The bright boys and girls in our day at school were content to dwell on low levels. Only occasionally was there a boy or girl who would go up the road even if there were hills, for no one cared. But now in classes all of his own power he can go as fast and as far as he likes providing he is getting the essence of what he goes over. He needs only the stimulus of leadership. The teacher must not get in the way.

But in the slow sections we met the question What is teaching? Is it leading the child into wider fields, or does it merely serve as a means of controlling the home industry of the pupil and of correcting mistakes made in acquiring lessons by himself? If we decided in favor of the latter we were committed to the old recitation method. If we believed the former, we must inevitably substitute supervised study. We felt that we had already paid too dearly a penalty for insisting on unaided home preparation. Then when we had accepted supervised study, had openly adopted the plan, we awoke to the conclusion that that was what we were doing right along. We had lived and helped

live; we had long had cooperative effort on the part of teacher and pupil; our classrooms resounded with life, for we had together summarized, we had together analyzed; we had inspired confidence in ourselves and in the new lesson, in together going over the difficulties, in revealing relationships and sequences. But even in the slow-moving sections, again the time, the place, the student, the teacher, and the subject varied the plan used, but in all classes the work was organized in terms of learner, not of subject. For instance, in the opportunity classes in English much time is spent in practice in silent reading. Here we felt much work should be done. In nothing more than in this most vital of all subjects is the range of capacities greater, but in all, they read at their own rate, for their own salvation.

Aside from supervised study in recitations, we have a variety of study helps. Whether these serve their purpose or not is largely a matter of opinion, not of proof. We have first of all at certain periods the old-fashioned study hall, wasteful and ineffective, and used only to conceal inadequacy in teaching room. Even in these we have one teacher who tries to help, but he may not be a specialist in the subject specifically needed. Then we have at certain periods of the day, smaller study rooms with a maximum capacity of forty, departmental study halls where the study program for that period is decided by the choice of the room and the teacher. This is spoken of in high terms both by teachers and students. Then we have, every period, a supervised study room, really a voluntary study help room, well patronized. Then we have supplementary study halls where pupils are assigned at a period not too convenient—after school—for drill in oral usage, grammar, mathematics, special composition, and Spanish. Here help is given in daily assignments, or in making up absence. We have tried them all, and our experience is merely our experience. We have opinions, no scientific data to offer—only this: on the reports of the term ending November 18, only $7\frac{1}{2}$ per cent of students in Lincoln High and Intermediate School failed in two subjects, and only 3 per cent of our English classes, and then on the double basis of failure because of lack of application and absence; and next term our new program calls for speed classes in history and Spanish also.

We feel the advantages outweigh the disadvantages. The disadvantages to the student are those only of having a poor teacher, one who might himself occupy all the time, who might use the study period for his own office work, who might weaken by helping too much, but the discreet teacher will soon be able to determine the character of progress being made while students are studying and will develop skill in aiding this progress by means of questions and suggestions. We feel, therefore, that supervised study is a plan efficient for all; it gives the teacher an opportunity, frees him from conference work, humanizes him; it saves the slow student from despondency and failure; it makes the fast student a trained, self-reliant worker with an enthusiasm for work.

ORGANIZATION AND EFFECTS OF SUPERVISED STUDY.

E. E. Wood, Principal Tamalpais Union High School.

The general problem of supervised study was considered at Fresno a year ago, so we need not enter into a discussion of its value.

There are three problems that have appealed to me, which I would like to present in summary form. First, the difficulties of the teachers in certain subjects under the old system of forty-minute periods. Let us take Algebra as an example. The teacher may present the subject ever so well, but the lack of classroom time will prevent the pupils from getting that drill in application of the theory which is necessary to make the explanation stick. So, some hours later, when he attempts to apply the theory, he fails, not having grasped some point, and so is unable to do the work for the next day, and in a short time falls behind the class. In Modern Languages, with so short a time to hear the language forms, the amount obtained is very small. By increasing the length of the period, the success of the teacher's work may be greatly increased.

The difficulties of home study, and even of study in large study halls, have been so often presented that it would be a waste of time to present them. Suffice it to say that we have been condemning students for failure to get home work when a large percentage have such poor conditions to study under that we ourselves would be unable to obtain the work. This problem, the supervised class study period under and with the help of the teacher in direct charge of the subject, will in large measure remedy.

From the standpoint of the administrator who is making out a course of study of student program, the single-hour period for mechanical or laboratory subjects is a vast benefit. With the double period the complications arising through the failure of a student in a single subject, thus throwing out his regular program, have been impossible of solution. The opportunities for conflicts are reduced by one-half by the single-hour periods, and pupils are enabled to take those special elective subjects such as sewing, drawing and cooking, which before they had to leave out, as they did not have two free periods at the proper time.

This plan for carrying out the new system in the Tamalpais High School is as follows: There are six full-hour periods, four in the forenoon and two in the afternoon. Each pupil is expected to take four solids and one special study, such as music, sewing, drawing, penmanship, etc., and have one full-study hour for library and other work. The full-hour class period is divided into two parts, and each teacher is required to allow at least twenty-five minutes for supervised study.

The place of the teacher during that time is down in the room watching the methods of study of the pupils and helping them with suggestions, when necessary. Each pupil under the system has four twenty-five minute periods of supervised study, and a one-hour period of study each day.

It is expected that about one hour of home study will be necessary under this system. If the student shows a weakness in his work he is required to drop the fifth subject and thus get two full hours of school study time. In this case no home work is expected.

What are the results of this program? The problems of the teacher and pupils as illustrated above in Algebra are almost completely solved. In the twenty-five minutes of study the difficulties of the work are found by the pupil and a few wise questions from the teacher will set him to thinking along the right lines. The problem of home study is reduced to a minimum and habits of careful study are obtained. The study hall problem is also partly solved, as not so large a number will be present under this system.

But the final proof of a system is to be found in its results on the number of students failing in their work. I have kept accurate record of failure for several years, and the school average has been about 8 per cent. This fall term, under the new system, the failures were reduced to about 4 per cent. At the same time the honor roll, or those making at least three solids of the highest grade, has doubled. Out of 275 pupils, only 12 have failed in two subjects in the half year.

With such results we feel that the new method has justified its existence, and, while not ideal, has been a big step forward.

ORGANIZATION AND EFFECTS OF SUPERVISED STUDY.

W. A. FERGUSON, Principal Porterville High School.

When asked to have a part in the discussion of supervised study, I was at a loss to know how to begin. Nothing startling has happened in our school as a result of the adoption of the plan. Our work has moved along about as usual this fall; we have had about the usual number of failures, the usual number dropping out, and about the same number on our honor rolls.

After making comparisons of the per cent of failures during the first two six-weeks periods of the past two years with this year, I find that this year's averages are about the same as the two previous years. In other words, in so far as records are concerned, we have made no phenomenal showing under supervised study thus far. Having asked our fifteen teachers to make a statement regarding the matter, I find, upon looking them over, that two of them feel that the plan is a handicap, while four are enthusiastic for it, and the rest prefer to reserve judgment on the matter until the plan has been longer in operation.

We did not introduce supervised study as a remedy for existing evils. Our study halls, while not models, were and are under good control, our students have stayed with us pretty well, as a graduating class of 51 for the past two years with total attendance of less than 200 for the two years average, has shown, and we think that at least an average standard of excellence in scholarship has obtained. We introduced it because we felt that we might be able to do a little more efficient work under the plan, and we still think the system will prove a success, at least to some degree.

Our plan in brief is as follows: We have five seventy-minute periods, three in the morning and two in the afternoon. The morning session begins at 8.30 and closes at 12.05, while the afternoon session begins at 1.00 and closes at 3.25. The first forty minutes of the period is devoted to the recitation while the remaining thirty minutes is given over to study of the lesson for the following day.

We have *not* done away with our study halls. We have five study hall periods corresponding to the five recitation and supervised study periods, and of course these study hall periods are seventy minutes long and are in charge of five different teachers. Every student, with certain exceptions which I will mention later, is required to spend his vacant period in the study hall. That gives each student under normal conditions four half-hour study periods in his four classes and one seventy-minute study period in the study hall, making three hours in all, and this, with one hour of preparation at home, we consider sufficient for the average student.

Any plan of organization, to be efficient, must work with the minimum amount of friction and with the least possible amount of energy

expended. Like a machine, the simpler the better. In a community such as ours the 8.30 hour for the opening of school proved to be a real problem, where over 75 of our students come from a distance of over five miles, with a number driving in a distance of eleven miles each morning. Over a hundred of our students come a distance of three miles or more. The difficulty of the early opening of school was partly overcome, however, by allowing the students from the country to so arrange their work, where it was possible to do so, that their vacant period came first; they were then allowed to come in any time during the first period, with the understanding that upon arrival they were to report to the study hall. While this plan took care of most of the cases, we still have some students coming in seven or eight miles to report to first period classes at 8.30, and where the means of transportation is a horse and buggy, as is frequently the case, it means early rising on the part of the student. In a high school of our size there are always a number of courses which enroll only enough students to make a single section, and of course some of these one-section courses have to come the first period in the morning, and inasmuch as some of our students from the country want these courses, and in some cases are obliged to take them, there is nothing else for them to do but to rise with the lark, or rather, before the lark, at this time of the year, if they are to be on time.

Another difficulty that has to be met in the smaller high schools with the five-period program also arises from the single section courses. There is not the opportunity to spread out these one-section classes that there is in a seven-period program. To illustrate, our English History class has to come at the same period as our Cicero class, and our second-year French class comes at the same time that the Commercial Law class recites. Of course an effort is made to arrange classes which recite at the same hour so as to make as little conflict as possible, but the difficulties are increased almost a third in going from a seven- to a five-period program.

To go back to the study hall, every student, with the exception of those who have permission to come late and the few who carry five subjects, spend one seventy-minute period in the study hall where, under the old plan they were spending from two to three forty-minute periods, depending on whether or not they carried any double period subjects. That is to say, we have not done away with the study hall, nor are we anxious to do so.

We do not consider the study hall a problem that needs solution, but simply a part of the organization that needs careful attention. Any good teacher can take care of a study hall of reasonable size, provided they will give it as much thought and attention as they give to one of their classes. I fail to understand how supervised study solves

the problem of the study hall if it is to be considered as a problem. A poor study hall is better than none at all, and with our conditions it is simply impossible to so organize our schools as to avoid it. We must have at least a five-period school, which means that students carrying the usual program of four subjects will have one vacant period which, in many cases, must come during the middle of the day. Those students who have the second, third, or fourth periods vacant have seventy minutes to put in somewhere, and inasmuch as nearly a hundred of them come a distance of three miles or more they must spend this time in the quiet, or at least comparative quiet of the study hall or else on the streets. Of course there are the pool halls down town, which would welcome the boys, and a city library which would accommodate a few of the girls, provided they would refrain from visiting and devote the time spent there to reading; but inasmuch as the study hall will do as well by the girls as the city library and, we think has some advantages over the pool halls for boys, we insist that both boys and girls report in the study halls. We have supervised study with the study hall, not supervised study instead of the study hall.

We adopted the five-period plan of seventy-minute periods rather than the six-period plan of sixty-minute periods, because we do not know how to provide for such subjects as Bookkeeping, Typing, Free and Mechanical Drawing, Manual Training and Home Economics on the latter basis. Under our old plan we gave each of the subjects a double period, that is, two consecutive forty-minute periods, making them each eighty minutes daily, while under the present plan we give them seventy minutes daily, thus reducing the time spent with these classes by ten minutes a day. A still farther reduction of ten minutes as would be necessary under the sixty-minute period, would make it impossible for us to cover the work as we have been covering it or make it worth the unit of credit we have been giving it. We try to make every course we offer represent an equal amount of energy expended in its mastery, whether it be a course in first-year Algebra, second year French, or Manual Training, but the work in Manual Training all has to be done in the school shop, while some of the Algebra can be worked out at home or in the study hall. Hence, a sixty-minute period does very well for the Algebra but does not work well for the Manual Training. I do not understand how schools that have the sixty-minute period get around this difficulty. To me there are but two solutions, neither of which I cared to attempt. The first is to reduce the credit of such subject as are necessarily nearly all laboratory work, such as Typing, Domestic Science, Manual Training, etc., and the other is to give them an extra period a week. The first plan I once tried, and made the course so unpopular that it had to be dropped.

The second plan complicates an already complicated program to the extent that, for the small school, it becomes impractical.

We find that there is a tendency among certain of our teachers to occupy the entire seventy minutes with the recitation, thus entirely eliminating the study period and frequently assigning an advanced lesson which, if prepared, would take another seventy minutes. What usually happens in cases of this kind is that the class come the next day very poorly prepared and in the end time is really lost. To overcome this difficulty it has been suggested that a hard and fast rule be made, that each teacher shall stop the recitation at the end of the forty minutes and to help them to remember it was further suggested that a bell be rung at the end of the forty minutes; but this would, in my opinion, be more harmful than valuable in that it would destroy the elasticity of the plan. Sometimes the use of the full seventy minutes for recitation is the most economical use of the time, while occasionally it is desirable to have the study period come in the middle of the period, and perhaps occasionally but rarely at the beginning of the recitation. In other words the teacher should have the entire seventy minutes at his or her disposal, but should be careful that the best use is made of it. When it is necessary to use the whole period for recitation, the teacher should assign a correspondingly short lesson and the teacher should see that the long recitation period does not occur too often.

In spite of the various difficulties which the plan of supervised study presents, we still believe that the arrangement has compensations which offset these drawbacks. The teachers at least have the satisfaction of knowing that a half hour of preparation has been put on their subject; they can have their reference books in their room and can teach the students how to use them and see that they do use them; they can give a word of suggestion here and there that becomes a time saver to the student and at the same time teaches him how to save that time for himself on another similar occasion. This is especially true in first year subjects such as Algebra and Latin. Students in these subjects, working under the eye of the teacher, will cover more ground with less waste energy than when working alone. It takes a very little thing to hold a boy up in Algebra, while attention called to a wrong sign or a mistake in multiplication may send him through a whole set of problems. We are not looking for astounding results, but we feel sure that the plan is well worth a trial. While we know it is not a panacea for all the high school ills, we will be satisfied if it brings up a few of the stragglers and makes it possible for us to progress a little farther in our thirty-six weeks than we have hitherto been able to do. If it will do this, we will be satisfied with the experiment.

SUPERVISED STUDY.

CARL H. NIELSEN, Principal of the High School, Vallejo, Cal.

There are probably only few teachers who do not know what a long task it is for pupils to learn "how to study." Personally I have recognized this fact for many years and have tried a number of different methods to help pupils in discriminating between what is absolutely essential and what is merely background in the various subjects studied.

We have used the divided period, the double period, the weekly period, and the occasional period, but have finally settled down to a combination of the conference plan and the daily extra period, as illustrated by the following:

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DAILY PROGRAM OF VALLEJO HIGH SCHOOL—AUGUST TO SEPTEMBER, 1916.

Teacher	Mr. Starnes	Miss T. O'Connell	Mr. Valentine	Mr. Brown	Miss Toy	Miss Deane	Miss DeFometry	Miss Nelson	Miss Wilkinson	Miss Soule	Miss Kirwin	Mr. Williams	Mr. Zinswiler	Miss Gladden	Charge Study Hall
Department	Physical	English	English	Science	Science	Domestic Science	Mathematics	Mathematics	Drawing	Latin	History	Eccl. Span. (S. H. P. R. Sp.)	Commercial	Commercial	
Supervisor	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Supervised Study	Commercial Geography	Typing	
October 1	Office	English 22	English 1 Sec. 1	Household Chemistry	General Science	Cooking and Sewing Double Period	Deficiency Period	Study Hall	Drawing	Deficiency Period	Greek History	Public Speaking	Shorthand 12	Commercial English 22	Nelson
October 2	Supervised	English 2	English 1 Sec. 2	Deficiency Period	Physical Geography		Study Hall	Geometry 11, Sec. 1	Drawing	Latin 11, Sec. 1	Modern History	Economics	Shorthand 21	Commercial English 11	DeFometry
October 3	Supervised	English 21	English 11 Sec. 1	Physics	Library and Study Hall	Cooking and Sewing, Double Period	Advanced Mathematics	Geometry 11, Sec. 2	Drawing	Latin 11, Sec. 2	Roman History	Spanish Sec. 1	Typing	Commercial Arithmetic	Toy
October 4	Supervised	Deficiency Period	English 11 Sec. 2	Double Period	Deficiency Period		Geometry 12 Sec. 1	Deficiency Period	Study Hall	Latin 12	Medieval History	Deficiency Period	Shorthand P. G.	Commercial Eng. Sec. 2	Wilkinson
Noon Intermission—One and One-half Hours.															
October 5	Supervised	Deficiency Period	English 21	Preparing Home Table	Physiology	Girls' Phys. Culture	Geometry 12 Sec. 2	Algebra 11, Sec. 1	Study Hall	Latin 21	French	U. S. History and Civics	Penmanship and Spelling	Shorthand 11	Wilkinson
October 6	Commercial History	English 21	Deficiency Period	Chemistry Double Period	Deficiency Period	Girls' Phys. Culture	Algebra 11 Sec. 2	Algebra 12 Sec. 1	Drawing	Latin 22	Study Hall	Public Speaking	Bookkeeping 2	Typing	Kirwin
October 7	Office	English 1	Study Hall		Biology	Deficiency Period	Advanced Algebra	Algebra 12, Sec. 2	Drawing	Deficiency Period	Deficiency Period	Spanish, Sec. 2	Bookkeeping	Deficiency Period	Valentine
October 8				Boys' Phys. Culture											

1. The first year of the program is divided into four quarters: History, Mathematics, English, Latin, and Science, etc.
 2. The second year of the program is divided into four quarters: Latin 12, History, Mathematics, and English, etc.
 3. The third year of the program is divided into four quarters: Latin 11, History, Mathematics, and English, etc.
 4. The fourth year of the program is divided into four quarters: Latin 10, History, Mathematics, and English, etc.

The conference plan works as follows: Out of the seven daily recitations or class periods we have set apart one, or in some cases two, which we have designated as "deficiency periods." If a pupil has fallen behind in any one of his subjects he must, during the deficiency period, set apart for this particular subject, go to his teacher for consultation and conference and instruction regarding the work in which he has fallen behind his class.

The teacher has here an excellent opportunity of guiding and stimulating the pupil through individual direction. Besides the chance offered "to make up" lost lessons, there is also always the opportunity of showing the pupil how to proceed with future lessons; not doing the work for him, but teaching him the best way in which to do it for himself; teaching him to do by doing for himself.

The deficiency period of any of our teachers takes precedence over any class period. In other words, if Jack is behind in his Latin, he will be required to call upon the Latin teacher during her deficiency period, whether he be in the study hall or in some other class.

We were at first apprehensive lest the calling of a pupil out of a class for deficiency purposes might produce friction in the faculty. But our fears have been unfounded. If a pupil is called into a deficiency conference from another class, the teacher of such class is generally reasonable enough to comprehend that the pupil is called from that class because the occasion is urgent.

This form of supervised study has produced in many cases a wonderfully sympathetic bond between teacher and pupil. During this deficiency period there is an absence of formalism and professional attitude. The intangible but natural barriers that too often exist in the classroom between teacher and pupil seem to be completely broken down during this deficiency period, often resulting in a heart-to-heart talk between teacher and pupil.

It is frequently represented by a confession of remissness on the part of the pupil with a sincere promise of doing better; while at the same time the sympathies of the teacher are drawn out by the frankness of the pupil and the consequent better understanding of the character of the pupil. This, then, represents one form of our supervised study. It deals particularly with the individual.

While the conference plan of the deficiency period serves an excellent purpose for direction and guidance of the study of the individual, it does not, of course, reach the pupils as a class.

We recognize the truth of Mr. L. I. Loveland's statement when he says that there should be a definite period set aside for teaching pupils "how to study." For that reason we have set aside one period every day for this particular purpose. While Mr. Loveland, as principal of

the high school at Pottstown, Pa., has set aside the last period in the day for supervised study, we have found it advisable to begin the school day 45 minutes earlier and take the extra period, between 8.15 and 9.00, for supervised study. (See program.)

The first period in the morning, then, preceding the regular class work, is the supervised study period. Besides this first period we have seven regular recitation or laboratory periods of 40 minutes each, the first recitation period beginning at 9.00 o'clock.

At 8.15 o'clock the pupils will go Monday morning to their respective rooms for the 9 o'clock recitations. They will there get instructions as to the proper method to pursue in studying the lessons in these particular subjects for the next two weeks. On Tuesday at 8.15 a.m. (the regular supervised study period) the pupils having recitations during the second period in the morning (9.46) will be given instructions as to the best manner of preparing their lessons in those subjects for the next two weeks. On Wednesday the pupils will, during the supervised study period, be instructed in the most efficient way to study the subjects of the third period for the ensuing two weeks. And so on, until the cycle of the seven periods is completed.

Every teacher in our corps, then, has an opportunity of beginning the daily work by saying to the class: "Here is the best way to prepare or to study the lessons for the next two weeks. These things are important and form the backbone of the work; those others are essential only in so far as they are an aid in completing the subject."* The teacher has here an opportunity of pointing out to the pupil what to remember and what to forget. The latter is quite as important as the former.

As may be seen from the foregoing, our supervised study has a two-fold purpose, to reach the individual as such, and to reach the class as a whole. The former we try to reach through the conference plan of the deficiency period, and the latter we attain through the daily extra period.

We think that our system of supervised study enables us to get a *maximum amount of efficiency with a minimum amount of energy expended*. We put our own particular system of supervised study into use at the beginning of the present school year, August 7; and we find that it is at least partially coming up to our expectations, so far as efficiency is concerned. We have an enrollment of about three hundred pupils.

It may interest you to know something about the results upon our school work of the introduction of supervised study. In our school we indicate scholarship by one of the following three markings: "Good,"

*Hall-Quest's Supervised Study.

"fair" or "poor." We have, in past years, tried all kinds of markings, but have finally settled upon these three because each one seems to be but the natural answer to the question of Johnnie's father when he asks, "What kind of work is my boy doing in such and such subjects?" We issue reports to all parents monthly. The markings expressed in percentage for the first semester of the present school year are as follows:

Analysis of Class Records, Fall, 1916. Vallejo High School, Cal.

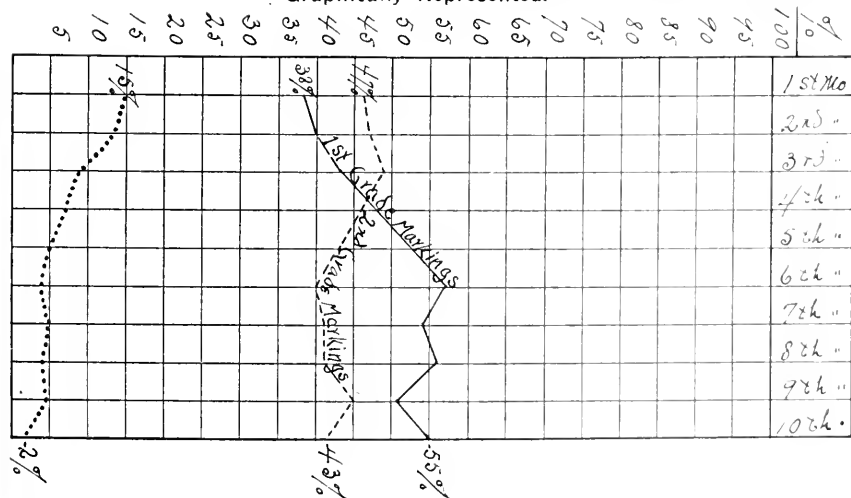
	Good Per cent	Fair Per cent	Poor Per cent
First month	38	47	15
Second month	40	47	13
Third month	41	48	8
Fourth month	48	45	7
Fifth month	52	43	5

NOTE.—Since addressing the California High School Principals' Convention on the above subject our annual high school records for 1916-17 have been completed. They show a substantial increase in the first grade markings and a remarkable decrease in the third grade markings, as may be seen from the following:

Analysis of Class Records, 1916-1917, Vallejo High School, California.

	Good, per cent	Fair, per cent	Poor, per cent
First month	38	47	15
Second month	40	47	13
Third month	44	48	8
Fourth month	48	45	7
Fifth month	52	43	5
Sixth month	57	39	4
Seventh month	54	41	5
Eighth month	56	41	3
Ninth month	51	45	4
Tenth month	55	43	2

Graphically Represented.



"Good" is the highest marking. "Poor" means unsatisfactory work. You will observe that out of every one hundred markings during the first month 38 were "good" and 15 "poor." During the second month 40 per cent were "good" and 13 per cent "poor." The third month shows a like increase in the "good's," there being 44 per cent, with a decrease in "poor's" there being only 8 per cent, while during the last month the percentage of high marks was 52 and low marks had fallen down to 5. In other words, there has been a steady increase apparently in the percentage of highest marks with a corresponding decrease in the percentage of poorest marks.

We believe that the increase in the percentage of the higher markings is brought about very largely by a somewhat changed attitude of the pupil toward his studies. Since we have adopted the plan of giving more time to directing the pupil's energy in studying and thinking, many of our pupils have evinced an interest where they were formerly apparently indifferent.

In anticipating the question as to what have been our most serious difficulties in administering the plan, let me say that I have been particularly gratified at the attitude of our faculty toward the subject of supervised study. I had anticipated at least a demurrer on the part of our teachers at the introduction of an extra period of work. However, the fault is mine; I should have known them better, after my long acquaintance with most of them.

At a recent faculty meeting I presented the statistics quoted above, and judging from the gratified expressions, I am confident that the teachers feel repaid for the extra energy which they have put forth in behalf of the pupils. As for the pupils, I have heard of no complaint on account of the additional extra period. On the other hand, I have heard from a score of parents expressions of commendation for the faculty. So much for the attitude of teachers and pupils toward the system.

I am frank to confess that I have observed the following difficulty (and occasionally do observe it still) in the practice of the system of supervised study. It is this, namely, that the teacher will, unless she is on her guard, unconsciously swerve from the part of directing and instructing the pupils in "how to study, how to use their intellects, how to master quickly and with skill their various tasks" and allow herself to run into the groove of regular recitation. I have experienced the same difficulty with my own class in Current History. But the signs are hopeful; we are learning, and we hope to reach our ideal some day.

Summing up, then, I may say that we attain our results of supervised study through the *conference plan for the individual*, the *daily extra*

period for the class, together with a double period in certain subjects that, from their very nature, demand more time and attention than the ordinary studies, such as Physics, Chemistry, Domestic Science, Typing, etc.

The supervised study period is, in the main, one of pleasure and inspiration to our pupils and our teachers. A comradeship relation seems to have grown out of this very work, in which the teacher becomes the good friend who is trying to aid the young people in their work, instead of finding through recitations vulnerable points in their encyclopedic epidermis.

As a further aid in the accomplishment of our work of supervised study, our board has been kind enough to furnish us with an ample number of copies of McMurray's "How to Study and Teaching How to Study"; of Dr. Earhart's "Teaching Children How to Study"; of Dr. Johnston's "The Modern High School," as well as of Mr. Hall-Quest's "Supervised Study."

Richard L. Sandwick, principal of Deertfield-Shields High School, Highland Park, Ill., a short time ago issued a little book, the purpose of which, the author tells us, is "to place before young students, in simple forms, the general principles of effective study." The title is "How to Study and What to Study." We have placed this book in the hands of our first year high school pupils, giving them a course of six weeks in the subject. We expect valuable results from the guidance and directions given in this course.

I can think of no more fitting way of closing than to say to you what I had occasion to say to State High School Commissioner Wood a short time ago, "As a last word, I am perfectly willing to admit, that in the matter of supervised study we are still struggling for light, somewhat like Longfellow's Savage, 'Groping in the darkness for the Hand we see not.' It is with a confident hope, however, that some day we may feel the reassuring clasp of that Hand as it shall lead us into the light of the new psychology—natural teaching."

CO-OPERATION IN THE TEACHING OF ENGLISH.

F. H. BOREN, Principal Lindsay High School.

The topic upon which the Commissioner of Secondary Schools has asked me to address you, "Co-operation in the Teaching of English," is one which in its fundamentals leaves little room for argument. We are all agreed, I believe, that the English, both oral and written, commonly used by our high school pupils and by our high school graduates is far inferior to what it should be after a period of language training ranging from eight to twelve years.

If there is any single aim of secondary education which may be considered basal and dominant, that aim is to endow our graduates with the fundamentals of a liberal education. The surest sign of the possession of a liberal education is the ability to use the mother tongue fluently, easily, correctly, and he who lacks that ability stands before his fellow men deficient in an essential element of such an education. In so far as we fail to develop in our students their full capacity for self expression, that far are we failing in the realization of one of our dominant aims.

In the discussion of this topic I confess to you that I bring few, if any, original ideas for your consideration. A bulletin has been sent out from the state office which covers the field in an excellent manner. It is the product of the labor and experience of a committee of that organization known as the California Association of Teachers of English and was sent out as Bulletin No. 7 of the State Board of Education. That bulletin has been in your possession for some time and is at your service. Consequently, in my talk this morning I shall take it for granted that you have read it and are familiar with its contents. I shall not, however, take it for granted that many of you have made any definite use of it. Recent reports from the chairman of the committee lead me to believe that the bulletin has not been as productive of constructive activity as it deserved to be. My efforts today, then, shall be toward the end that co-operation in the teaching of English may soon be the rule in California high schools rather than the exception.

The old motto, "United we stand, divided we fall," will serve to illustrate my first point, which is that co-operation is necessary if we are to achieve the desired results. Permit me to quote from the bulletin:

"It is a mistake to suppose that any English curriculum, however ideally planned, can of itself secure the desired results in either oral or written expression. The fallacy of such a supposition is apparent as soon as one reflects that the task before us is that of creating in our students *habits* of effective expression, and that such habits can be formed only by a more extensive practice than is possible during the limited time of English study. Again, is it reasonable to suppose that bad habits of expression, accumulated during many years and aggravated constantly by the myriad examples of poor English in the student's environment,

can be checked and made over in one class, while they are tolerated in other classes? Unless, then, the efforts of the English department are supplemented in other departments by a continual and rigid demand for good English, no habits of effective speaking and writing will be established. Without co-operation there is constant danger that teachers of other subjects will foster the very conditions we are trying to remedy.

"Thus it follows that unless co-operation is observed all other plans or remedies will necessarily fail of truly efficient results. Habit is the keynote of all training in English expression; to establish correct habits by the constant demand for effective English in *all* subjects is absolutely the only hope of attaining satisfactory results."

That the need is recognized by the University of California is shown by the following resolutions passed by the schools committee of that institution:

"Be it *resolved*, That the Committee on Schools regards as highly desirable the co-operation of all departments of a high school in securing a correct and effective use, oral and written, of the English language; and that this committee shall encourage in all possible ways the extension of the principle of co-operation in the high schools of the state;

"And be it further *resolved*, That this committee does herewith cordially approve the report on such co-operation prepared by a committee of the California Association of Teachers of English, and submitted to the principals and teachers of the California high schools by the Commissioner of Secondary Schools; also the plan of co-operation suggested in this report;

"And be it further *resolved*, That this committee shall instruct all school examiners and visitors to inquire particularly as to the amount and success of such co-operation in each and every school that may be visited."

As proof of the sincerity of the university in the matter I call your attention to the fact that within the university itself there is in operation a scheme of co-operation in English. I have in my possession the university's blank report on delinquency in English expression. Explanations on the back of the blank bring out the fact that each instructor is requested to co-operate in a plan to make for better written expression. The plan involves the warning of the student of his deficiency, report of repeated delinquency to the proper committee, and finally, assignment to special work in English, if such action is deemed necessary or advisable.

Furthermore, the very fact that the university feels it necessary to take such a step shows that we ourselves have been delinquent in failing to give proper training to and to inculcate proper habits in the students who were to attend the university.

The facts in the case, then, seem to be about as follows. For years practically all of us have been placing upon the department of English

almost complete responsibility for the formation of proper habits of expression. We have given insufficient consideration to the fact that the student is under the direction of his teacher of English not more than two hundred minutes per week—in composition work not more than eighty minutes per week—and that to expect this one teacher to overcome in that short period the bad habits of expression acquired in the home, on the playground and in the social environment is ridiculous. Without co-operation the English department is the only one vitally interested and as a result of that interest and its attendant responsibility has been saddled with the major portion of the criticism. Why should not the other departments assume their share of the responsibility? High school students are in school not more than five hours per day, five days per week, from thirty-six to forty-two weeks per year. If during every minute of that time careful attention were paid to the use of English, the time would be too short to make a complete substitution of habits of good usage for the habits of poor usage contracted in the social environment.

About a month ago I addressed a letter of inquiry to Professor Kurtz of the University of California, chairman of the committee on co-operation, requesting that he give me the results of a questionnaire sent out from the state office under date of April 26, 1916. You will remember that the questionnaire was sent out by Commissioner Wood and was designed to determine just what schools were using some plan of co-operation, the extent of the plan, and whether or not the experiment had been pushed with vigor. Professor Kurtz informed me that at the time I wrote him—one month ago—only 26 schools had reported more or less definite plans of co-operation in use, 81 had reported unsystematic co-operation, and 49 had reported no co-operation at all. In view of the fact that that which is not done systematically is usually not done effectively, I am of the opinion that the co-operation in these 81 schools is of doubtful value. In most cases they probably represent the type where everybody realizes what a splendid thing co-operation is but few carry out the idea in practice. At best the plans must be vague and indefinite. Professor Kurtz states that at the present time he is in correspondence with the principals of eight other schools and that indications are that some form of co-operation will soon be inaugurated in all of them. With 275 schools listed in last year's directory the condition is apparent at a glance.

For any system of co-operation there are certain essential elements. The first of these is a principal who is not only in sympathy with the idea but has the ability and the determination necessary to carry it to a successful issue. The problem is fundamentally one of administration and unless the principal or his representative is in direct control of the situation there is bound to be work of a hit or miss variety.

No two teachers will have exactly the same idea as to what co-operation means and unless there is definitely constructive direction of their work, they are bound to separate widely in the carrying out of the idea. This is not a criticism of teachers but an acknowledgment of individual differences. It will be the duty of the principal, assisted if necessary by a faculty committee, to lay down rules of action and then to supervise the work in such a way, that he knows there is uniformity of action.

Another essential element is a body of teachers who are in sympathy with the scheme. I need not discuss with you the difficulty of getting satisfactory work in any given line when the teachers are out of harmony. But in this case harmony is easy to obtain. The goal toward which advocates of co-operation are striving is so easily understood by anyone with educational vision that an enthusiastic principal will have little difficulty in securing loyal support in the program which he maps out. Therefore, before any plan of co-operation is put into practice there should be frank and free discussion of it in all its phases, both formally in teachers' meetings and informally in personal conversations, in order that all teachers may be brought to realize the importance of this particular line of work and its close relationship to the general effectiveness of high school education.

In the third place, there must be a definite working plan. Undirected enthusiasm and inspiration in themselves are not sufficient to achieve the desired results. Set rules and regulations must be worked out in order that there may be uniformity and united effort.

Working plans will necessarily vary with schools of different sizes and different atmospheres, but certain basal elements must be at the foundation of all. I present for your consideration five essentials for any definite and complete plan of co-operation in the teaching of English: recitation rules, rules for all written work, special opportunity for the practice of oral expression, supervision of the students' use of English at all times, and opportunity for the correction of deficiencies.

With regard to suggested plans I can do no better than refer you once more to Bulletin No. 7, especially pages 5 to 8. There we find suggestions worked out by a committee eminently well qualified to devise a practical working plan of action. However, I believe that these conventions should be largely experience meetings and for that reason I shall outline for you the plan in operation in the Lindsay High School. In dealing with the situation there I can speak in specific rather than in general terms. I know definitely what the situation is and how the plan is working. Consequently I can speak with first-hand information available. We lay little claim to originality in the matter. From the highways and the byways we have gathered information. We have modified this information to suit our local conditions, have

organized it to suit ourselves, and to suit our vanity and challenge our loyalty we have called it the Lindsay Plan.

First of all we have sets of rules for recitation and written work. They are so simple in their nature that I need not read them to you, though I am prepared to do so if you desire. They are such as any competent teacher of English might draw up in a satisfactory manner. In brief, they provide for good English and good position during recitations and for good English and good form in written work.

One of the strongest single features of our plan falls under the head of the third essential enumerated in a paragraph above, namely, opportunity for special practice in oral expression. We have divided the school into ten Oral English clubs arranged by classes and each enrolling about seventeen members. There are two senior, two junior, three sophomore, and three freshman clubs, each under the personal direction of a teacher. Every teacher in the school is in charge of a club and every student is a member of one. I confess that I approached this particular part of the scheme with fear and trembling. At one time I taught in a school where each and every teacher was required at stated intervals to supervise work in declamation. Conditions were such that there was little or no interest in the work and it soon degenerated into a farce which did no good and possibly some harm. At least it took perfectly good time which might have been put to better use. With that experience in mind I hesitated at the thought of inaugurating a similar scheme in such a vital matter as co-operation in the teaching of English. In a larger school it would have been possible for me to place the work under the direction of a few teachers who were particularly interested in oral expression and have them manage it, but in a ten-teacher school it did not seem possible to do that. It was necessary for each and every one of us to put his shoulder to the wheel. A meeting of our high school teachers' club settled the matter. After a thorough discussion of the situation the teachers were so enthusiastic over the idea and so willing to help in any way possible that we decided to get to work at once.

Club meetings are held during school time, one period each Thursday being devoted to them. In order that no injustice shall be done in the matter of time lost from other classes, there is rotation of periods so that each class loses one period every seventh week, a small price to pay for the results obtained.

All clubs operate under the same constitution and by-laws, there being no difference except in name and meeting place. The constitutions were taken almost wholly from a book which ought to be in your hands whether you use it as a text or not. I refer to Brewer's Oral English. We have received more help from that book than from any other single source. I refer you to pages 298-301 for a model constitution which can easily be adapted to the needs of any school. In view

of the fact that some parts of our constitution are unique as far as my experience goes, I shall take the liberty of quoting a few sections:

"Article 4, Section 2: The president shall be elected at the *beginning* of each meeting. The president of the previous meeting shall conduct the election, which shall be without ballot.

"Article 4, Section 3: The secretary and the critic shall be appointed by the president.

"Article 7: It is understood that the acts of this organization are subject to the approval of the teacher, who may at any time take charge of the meeting.

"By-Laws: Article 1, Section 1: No person shall serve in any one office for more than one meeting in one semester.

"Article 1, Section 6: The president and secretary for each meeting shall act with the teacher as a program committee for the succeeding meeting.

"Standing Rule No. 1: It shall be the duty of each member to come to each meeting prepared to speak before the organization.

"Standing Rule No. 5: No member shall be allowed to decline an office."

Our short experience of last year showed that we could not leave the matter of programs entirely in the hands of club program committees and expect the best results. This year, therefore, we have a faculty committee consisting of the two teachers of English and the principal. The committee determines the general character of each program, leaving it to club committees only to select speakers and to determine, if necessary, the exact nature of the program within the limits established by the faculty committee. Such a plan makes it possible for a definite series of programs to be held, each looking toward the accomplishment of a certain end. To illustrate: Our first two meetings this year were debates. That feature was selected because there is natural interest in competition, and we wished to work up enthusiasm. In the second debate teachers and students alike came to realize how incompetent and untrained the speakers really were and the need for systematic effort was recognized. To meet the need the faculty committee planned a series of meetings with the thought of giving the necessary preliminary training. The programs in their order were: a series of "How to —" speeches designed to give practice in speaking on a familiar topic; a series of reports on points to be remembered in addressing an audience (Brewer's Oral English, Chapter 3); a series of argumentative talks; and a debate. This debate was followed by interclub debates designed to incite rivalry and to give each club an opportunity to see what some other club was able to do. At present we are working toward the presentation of scenes from famous plays. We shall work through the steps of extempore dialogues and extempore plays.

In all these programs certain topics are assigned definitely to certain members, but there is usually a general topic upon which extempore speeches may be made. Even if there is no such topic assigned in advance the chairman does not hesitate to call upon members for impromptu speeches.

Recognizing the fact that poor language conditions on the playground often neutralize good conditions in the classroom, we devised what we call "Use of English" grades. Each month every teacher

submits to the office a grade for every pupil coming under his observation during the preceding month. We attempt to supervise the students' use of English at all times when they are under school control and to grade them even though they do not come under our immediate instruction in the classroom. The grades thus submitted are summarized and a grade entered on the student's card which is in conformity with the collective judgment of the teachers.

As yet we have not definitely met the problem of affording the students special opportunity for correcting known deficiencies. The burden here rests on the teachers as individuals, particularly upon those in the English department. Conditions differ from those in the ordinary school only in that a higher percentage of teachers are personally interested in the matter and therefore give it more attention. The plan, however, as a definite working scheme is short in this particular.

Estimating the results of a system which has been in operation less than a year is a difficult matter at best. To that difficulty the personal element is added in this case. In attempting to measure the results of any experiment for which we ourselves are responsible we are apt to make the wish father to the thought and to see only the good things. To safeguard myself in this particular I shall say at the beginning of my summary that no marvelous results have been obtained. The school has not been revolutionized. On occasion we still hear "I seen" and "I aint got no" and now and then an examination paper comes in which would dishearten the most sanguine. Nevertheless, some very desirable results have been obtained, results that tell us that we are on the right track and that give us the courage to persist in our efforts. We believe that when the time has come that every class in the high school has been under the influence of the co-operative system during the whole of its high school life the standard of English usage will be appreciably higher than it has been in the past.

Certain definite results are worthy of your attention. First, the reaction upon the teaching force has been beneficial. At Lindsay we high school teachers are much like the teachers in most high schools of the state. Some have always been careful of their use of English and by their example have been a source of inspiration to their pupils. Others have been careless and have tolerated carelessness in others. I have noticed that all have become more careful. Students have been criticised by teachers and have in turn become more critical of their teachers, with the net result that all of us are more careful than we were. Personal pride is the chief factor, for we like to appear well in our pupils' eyes.

In a supplementary manner, the teachers are more critical of the students. Standard rules, coupled with the fact that grades must be given every fourth week, have made them more observant. They see more keenly and correct more faithfully.

The students are more careful of their own language than they were before we began the experiment. On the grounds or elsewhere when one of them has been guilty of a noticeable grammatical error, he is very apt to hear "'D' in Use of English" immediately. ("D" is our grade for poor work.) This was particularly in evidence for the first two or three months the system was in operation, but is still apparent, even though the newness has been well worn off.

As I indicated a few moments ago, I believe the Oral English clubs have been the strongest single feature of the plan and have been productive of the most good. In the eyes of the pupils they seem to have been the focus of all the scheme. They were the feature which was distinctly out of the ordinary and they immediately secured and have steadfastly held the interest of all teachers and practically all pupils. They have called home to everyone that the use of good English is not merely of scholastic concern, but has direct connection with everyday life. They have been looked upon as of vital concern, important enough to cause the setting aside of regular lessons at stated intervals. The programs, with few exceptions, have been good, interesting, and instructive as well. Our boys and girls are more able to stand firmly upon their feet and talk, thinking on their feet instead of with their feet. We have practically no real debaters, for we are not trying to develop debaters, but we have many who can stand before an audience and speak intelligently and with proper regard for the mother tongue.

Written work is better under the same old conditions, insistent and persistent demand for better work. Our advantage lies in the fact that more people are making the demand under the co-operative system than did so under the nonco-operative. We still weep over some papers, but the number is less in spite of the entrance of a first-year class decidedly below normal. Practically all papers show improvement in superficial appearance. The margins are better and the general form is more pleasing—or less displeasing, depending on the point of view.

In conclusion let us summarize the facts in just a few sentences. In the past—and in the present, too—too great responsibility has been placed upon the teachers of English in the matter of the formation of proper habits of English usage among the students of our high schools. Too little responsibility has been placed upon the teaching force as a whole. As a result deserved criticism has been and is being directed toward the high school. The problem of meeting the conditions is essentially one of administration. As school administrators it is our duty and it should be our pleasure to endorse and to put into operation those plans which are for the general welfare of the schools under our charge. May I leave with you this plea: that you will give the idea of co-operation in the teaching of English your most earnest consideration to the end that you may see the advantage of team work over individual play in the inculcation of proper habits of expression, and may adopt or devise schemes to carry out in practice what you accept in theory?

CO-OPERATION IN THE TEACHING OF ENGLISH.

G. A. BOND, Principal Santa Cruz High School.

There are two points in this matter of co-operation in the teaching of English which I wish to discuss briefly.

In the first place, it is, of course, very necessary to provide a *system* of co-operation. No one will gainsay that, but any system is dependent for its success wholly upon a *spirit* of co-operation. Hence the question how to secure such a *spirit* of co-operation is vital in its importance. I have to suggest the following three steps in such a procedure. These have been used with satisfaction in the school from which I come.

First, get a thorough conviction on the part of all the teachers of the *essential importance* of co-operation in the teaching of English. This involves their recognition of two facts:

First—that habits of correct expression are an essential part of the pupil's education.

Second—that it is their job, and not merely that of the English teachers, to develop those habits.

The second step is this: In the formulation of a plan or system, the work should be done by a faculty committee. This secures a feeling of harmonious co-operation such as would be impossible if the plan were handed down from above. It also makes it apparent that it is not the business of the English Department. And this desirable effect is most surely produced if in the selection of such a committee one does not even include any of the English teachers.

The third step is to provide for "follow up" work. The system may be ever so clever, and the spirit enthusiastic, but it will die a gradual death if it is left to itself. The principal must keep faithfully after it. This presupposes deep and earnest conviction on his part. He should watch its working and encourage its operation in all his supervising activities. The committee, moreover, which draws up the plan, should be continued as a standing committee to study the subject and report frequently, keeping the matter a lively one, ever before the school.

These appear to me to be valuable methods of creating and preserving a *spirit* of co-operation among *teachers*.

Equally important, however, is the spirit of co-operation among the students, though this is much harder to secure. It should be a *school affair*, a part and expression of the school spirit—its tradition and its pride. There should be both an individual and a community ambition to speak and write well. To bring this about the principal should talk to the pupils in groups at the beginning of the year, speaking enthusiastically on the subject, and endeavoring to arouse their interest and ambition both as individuals and as a school. Then the teachers must keep the subject before the students' consciousness by

frequent talks, by reports of results, by reading articles on it from educational journals and other sources, and by many of the means that will be suggested by their own ingenuity. Finally, the school paper should be made an efficient organ for its propaganda.

The other point which I wish to make is that there is, in all this concentration of attention on the correctness of expression, a very distinct danger. That is, that both teachers and pupils will tend to misplace the emphasis from matter to form. In all school work, of course, the matter must be eternally the more important. The immature student must not have his enthusiasm for interesting subject matter lessened by petty nagging about form.

Here is one of the severest tests of a teacher's ability, and it is hard for the most skillful English teacher who is trained in this very particular always to draw the line wisely. In other words, *without* co-operation in the teaching of expression, teachers other than English teachers are apt to fall into the error of considering matter everything, and thus causing the condition which we have at the present time, the evil against which this agitation is directed, viz. the feeling that correct habits of speech are merely a hobby of the English teachers and of no value in reality.

On the other hand, *with* co-operation, they are apt to fall into the opposite error of being unskillful in making form and matter work into their proper places and just proportions.

The attitude of the typical school teacher in the "hearing" of a recitation is the most discouraging in the world for one to face who has something to say. There was once a teacher on my faculty who I felt was analyzing every sentence and parsing every word I uttered when I talked to her. I couldn't talk to her comfortably. How could I expect a student to? The teacher who is always on the alert for errors of speech will show it so plainly in his attitude that he can not be an appreciative audience, and an appreciative audience is an absolute essential in stimulating a student to good oral or written expression. How often have you seen a school teacher's face behind the desk shine with interest when a pupil is reciting? Rare gift—to be able to forget sometimes to be a teacher!

Now, if this latter described condition, of overemphasizing form and nagging about errors, is going to be the result of cooperation in the teaching of English, it were far better not to have any. And this *is* the danger unless there is high pedagogical skill.

The chief remedy for this lies in reducing to the minimum essentials the number of errors you are going to watch for. The teachers should all come to an agreement on a *few* principles, if the students follow which, their expression will be satisfactory.

In our school the committee has drawn up a list of what are called

the requirements for the Diploma of Efficiency in Expression. Some of these are positive, and some are negative. To be on the watch for these few simple things will not take the teacher's attention away from his subject matter, will not give him the critical attitude, the bearing of a pedant. Necessary corrections are sufficiently infrequent so that the enthusiasm of the class is preserved. Yet, if good results are secured in these particulars, we should be entirely satisfied. That they may be so secured is attested by the unanimous testimony of my faculty in a recent teachers' meeting. The head of the English Department said that this was the best experiment as regards its reaction on the English Department she had ever seen tried in her long years of service, and that her own blue penciling in composition had fallen off 50 per cent since the system had been established.

I would not have you believe that the apparent negative and corrective phase of this work appears to me to be the most important. The positive side of such a work is indeed infinitely larger, viz, the establishment of a spirit among students, a far-reaching desire to talk and write well, which will go forward to the building up in our people through the growing generations, of that which we now notoriously lack—a national habit of good speech.

Requirements for the Diploma of Excellence in Expression in the Santa Cruz High School.

The following directions cover the minimum requirements for recommendation for the Diploma of Efficiency in expression.

1. Make clear statements. Avoid vague and incomplete sentences. Do not begin a recitation with "Why."
2. Do not dodge the question. Answer just what is asked.
3. Use correct form of definitions. Do not begin by saying, "It is when——."
4. In writing recognize the complete sentence, then punctuate and capitalize properly.
5. Use and write title correctly
6. In speaking and writing avoid errors in *grammar such as the following*:
 - a. Double negatives: as, "That don't make no difference."
 - b. Plural pronouns with singular antecedents: as "Everybody must get their tickets today."
 - c. Failure to make subject and predicate agree in number: as, "He don't," or "A crowd of boys *are* going fishing."
 - d. The use of the perfect participle for the past tense of the verb: as, "I seen him do it."
 - e. Failure to make pronominal adjectives agree with their nouns: as, "Those kind."
 - f. The use of the preposition *like* for the conjunction *as* or *as if*: as, "It looks like it is going to rain."

REPORT OF COMMITTEE ON LEGISLATION.

RIVERSIDE, CALIFORNIA, December 29, 1916.

To the Members of the State Principals' Convention.

LADIES AND GENTLEMEN: The Committee on Legislation begs leave to report as follows:

In the first place, we wish to acknowledge the interest that has been shown by the principals of the high schools of the state as evidenced by the number of suggestions that have been made to this committee. Every one of these suggestions has had merit, but we have felt it our duty to be guided by three principles. We have discriminated between matters that already have the support of other educational bodies, and matters originating with the members of this convention. We have felt that if our efforts are to be efficacious, that is, result in legislation, we must *limit* our recommendations to the legislature. Lastly, we have discriminated between matters of local and of general importance, and will bring before this body only such recommendations as we feel have a bearing upon all the high schools of the state.

We recommend that this convention endorse and pledge its support to the following measures affecting the educational welfare of the state, which are to be proposed to the legislature at its coming session by other educational organizations of California:

1. A bill authorizing boards of education to levy a tax for building purposes on the same basis as the maintenance tax is now levied. (Council of Education.)
2. A bill authorizing free textbooks for all high school pupils, said books to be purchased by boards of education and selected from the list prepared by the State Board of Education. (State Board of Education.)
3. A bill providing for a Bureau of Visual Education, under the control of the State Board of Education. (California Visual Education Association.)
4. The amendment and clarification of section 1617 regarding the powers of boards of education to meet expenses connected with commencement exercises and other extra classroom activities of high schools. (City and County Superintendents' Convention.)
5. The amendment of section 1576a, specifying in more detail what "other employees" may be hired by boards of education. (City and County Superintendents' Convention.)
6. The appropriation of an adequate sum of money to provide for a survey of occupations of the state of California. (Vocational Guidance Section of the C. T. A., Southern Section.)
7. The certification of high school librarians. (Council of Education.)
8. The provision of adequate funds for the support of the School of Education of the University of California. (Council of Education.)

9. The establishment of a commission (state) of insurance, for school and other public buildings. (City and County Superintendents' Convention.)

We recommend that the State Commissioner of Secondary Schools be requested to use his best efforts to initiate and secure legislation on the following matters:

1. We recommend that high school boards be authorized to establish and maintain, in connection with the day high schools under their charge, day or evening classes outside the hours of the regular day sessions; that such classes may be conducted at such hours, and for such length of time each day, and for such days, and for such length of time during the school terms, as may be determined by such boards; that the attendance upon such classes be reduced to units of average daily attendance and added to the attendance of the respective high schools, and that the principals of high schools may admit to such classes, conducted outside the hours of the regular day high school sessions, any individual not subject to the provisions of the compulsory education law.
2. We recommend that the law restricting the length of school sessions to six hours be amended in such manner as to provide that the phrase "six hours" shall apply to the time that a pupil may be required to be in attendance upon school sessions during any given day.
3. We recommend that high school boards be authorized to establish and maintain part-time agricultural, industrial, trade or commercial classes, and that additional state aid be provided therefor; provided, that if the so-called Smith-Hughes bill, now pending in the national congress become law, such legislation is recommended as will provide a state fund for vocational education which shall equal the amount that will be available in this state from the national fund.
4. We recommend such legislation as will provide that attendance at junior colleges may be counted as high school attendance, in order that funds for the support of junior colleges may be apportioned as high school funds are now apportioned. Also, that the establishment of county, union, and joint-union junior colleges be made legally possible.
5. We recommend such legislation as will make every school district of the state a high school district, or a part of a high school district; and, in connection with such legislation, we recommend that the present law governing union high schools be amended so as to allow a more judicious arrangement of districts.
6. We recommend that section 1741 be amended so as to give high school boards the power to build, equip and maintain dormitories for the proper care of pupils attending intermediate schools, high schools, or junior colleges where such facilities are found necessary; and that boards may make such charges to the pupils as shall insure the repayment of the actual running expenses of such

dormitories, outside labor and supervision expense, and that such labor and supervision expenses be included in the cost of school maintenance and paid accordingly.

H. O. WILLIAMS, Chairman,
Sacramento.

E. M. COX, Oakland.

L. E. KILKENNY, Salinas.

L. P. FARRIS, Sutter City.

E. H. McMATH, Santa Ana.

W. L. GLASCOCK, San Mateo.

B. O. KINNEY, South Pasadena.

H. P. REYNOLDS, Pomona.

H. G. CLEMENTS, Redlands.

J. O. OSBORN, Redding.

DELBERT BRUNTON, Fullerton.

W. O. SMITH, Petaluma.

MRS. E. C. INGHAM, San Fernando.

E. E. BROWNELL, Gilroy.

HUGH LAW, Riverside.

REPORT OF COMMITTEE ON RESOLUTIONS.

Mr. Chairman:

Your Committee on Resolutions having consulted with practically every high school principal in the state, having held special conferences with all the officers of this convention, having held one joint meeting with the Committee on Legislation, having received advice from the members of the State Board of Education, and having held four rather protracted meetings, including both eating and sleeping hours, beg leave to submit the following resolutions:

WHEREAS, The meetings of this convention have so abounded in interest and profit and have been conducted under conditions of such pleasure and convenience; therefore, be it

Resolved, That we, the high school principals of California, in convention assembled, do hereby express our appreciation of, and thanks to, Commissioner Will C. Wood for his painstaking and able service in planning and carrying out this convention program, to the officers and members who have given their time and effort to facilitating the work of the convention to the mayor, superintendent of schools, and citizens of Riverside who have given us such assurance of the welcome of their city, to Mr. Miller, Mrs. Richardson, and Mr. Hutchins for the gracious hospitality to the Mission Inn, to the press of Riverside for its careful and sympathetic reporting of convention proceedings, to the members of the State Board of Education, to Lieutenant Governor William D. Stephens, to Dr. Thomas H. Briggs, Prof. F. M. Leavitt, Prof. Harry Kendall Bassett and all other convention speakers for their thoughtful and able presentation of subjects of such vital interest to all high school principals.

WHEREAS, Each and every resolution offered by the Committee on Legislation has been read, discussed and judged by the members of this committee; therefore, be it

Resolved, That the entire Report of the Committee on Legislation is hereby endorsed and recommended by the Committee on Resolutions. Furthermore, that the high school principals in convention assembled, express their hearty appreciation and thanks to Commissioner Will C. Wood for his biennial report of June 30, 1916, of its brief, yet comprehensive contents, for its helpful presentations and discussions of the problems of our secondary schools.

WHEREAS, The place and the content of secondary education are neither determined nor fully understood; therefore, be it

Resolved, That a committee of twelve, to be known as "The Committee on the Reorganization of Secondary Schools," of which the State Commissioner of Secondary Education is hereby made a member, be

appointed by the chairman of this convention to investigate the needs and purposes of our intermediate schools, our high schools, and our junior colleges; and at the next regular meeting of this convention recommend a more specific content, place and purpose for the different phases of secondary education.

Whereas, Many high schools of the state have raised their standards and enriched their courses of studies, therefore, be it

Resolved, That this convention, through its committee of twelve, requests the state university—

First, to reestablish the status of the "student at large" thus allowing a recommended high school graduate with forty-five credits to be admitted to the various elective subjects for two years, that he may, within that time, determine the college in which he seeks a degree:

Second, to be liberal regarding the allowance of credits for special newer subjects not yet recognized as worthy of accrediting, thus increasing the present nine possible credits to a maximum of fifteen credits; and be it further

Resolved, That this committee be authorized to represent the membership of this convention with full power to act upon adopted resolutions; and be it further

Resolved, That this committee confer with the authorities of the University of California relative to the entrance requirements of the university and report the results of such conference, with its recommendations, to the members of this convention before the next annual meeting; be it further

Resolved, That this committee investigate and report upon a more adequate and just system of scholarship and educational measurements of high school pupils; be it further

Resolved, That the recommendations of Commissioner Wood on free textbooks, on evening high schools, on junior colleges, on the university high school, and on intermediate schools are heartily endorsed by this convention.

WHEREAS, There is great waste of time and energy on the part of high school pupils, and subsequent life failures, because of a lack of understanding the relations existing between courses of study and life vocations; therefore, be it

Resolved, That every principal should see that careful counsel be given to all pupils entering high schools that they may select work, which as far as possible, shall have a definite life purpose.

WHEREAS, The varied activities of the California Teachers' Association resulting in benefit to the schools and teachers of the state, are sadly handicapped by lack of adequate funds; and

WHEREAS, We believe an extension of the association's activities to be desirable; therefore be it

Resolved, That the members of this convention, as members of the California Teachers' Association, recommend to the California Council of Education that an increase be made in the annual membership fee to meet the emergencies of the situation.

WHEREAS, The secondary school rests upon the elementary as a necessary foundation; therefore be it

Resolved, That we heartily recommend—

First, greater cooperation and team work between these two great public institutions; and

Second, increased financial support for the elementary school, that the equipment, course of study, and length of school year may be as adequate to its needs as those provided for the high school.

WHEREAS, The principals of high schools realize the difficulties of the small high schools of the state in securing teachers of special subjects qualified to teach subjects other than their specialities; therefore be it

Resolved, That the State Board of Education take such steps as they may deem necessary and wish to provide, for the granting of special certificates in major and minor subjects along the line suggested in the Report of the Commissioner of Vocational Education.

WHEREAS, We recognize the difficulty experienced by students wishing to pursue high school courses in music, art or other branches not offered in the high school; therefore be it

Resolved, That credit for private instruction in music, art, or other branches be given only after thorough investigation or examination by the faculty of the high school concerned, and that unit of credit be given only when the faculty is satisfied that the work offered is equal in quality and quantity to that required for a unit of credit in the high school.

Resolved, further, That we deprecate as unprofessional the use of any state credential or teacher's certificate for advertising purposes and that we consider such action as sufficient grounds for the revocation of such document by the authority granting it.

WHEREAS, Effort is being made to secure the convention of the National Education Association for Portland, Oregon, July 3 to 8, 1917, and whereas, the final decision rests with the National Executive Committee, which body is now investigating the facilities offered by the city of Portland and the necessary granting by the transportation lines of a rate satisfactory to Eastern and Pacific Coast teachers; be it

Resolved, That this convention favors the holding of the N. E. A. in Portland and that this action be through Secretary Chamberlain of the

California Teachers' Association, communicated to the Executive Committee of the N. E. A.; and that he be further instructed and empowered to take up with the transportation lines on the Pacific coast the matter of reduced rates to the meeting.

(Signed) JAMES E. ADDICOTT, Chairman;
L. W. BABCOCK, Secretary;
F. PALMER,
NATHAN SMITH,
A. R. CLIFTON,
W. HYMAN,
W. MCKAY,
DUNCAN STIRLING,
FLORENCE M. GORDON,
GEO. U. MOYSE,
B. R. CRANDALL,
S. P. MCCREA,
W. H. NICHOLS,
W. A. PRATT.



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